

Statement on

Pension Portability and Preservation
Including Findings on the Receipt and Use of Preretirement Lump-Sum Distributions

Hearing on Trends and Issues Related to Pension and Welfare Benefit Plans
Before the House Select Committee on Aging Subcommittee on Retirement Income and
Employment

27 July 1990

by

Joseph S. Piacentini
Research Associate
Employee Benefit Research Institute

The views expressed in this statement are solely those of the author and should not be attributed to the Employee Benefit Research Institute, its officers, trustees, sponsors, or other staff. The Employee Benefit Research Institute is a nonprofit, nonpartisan public policy research organization.

Statement on Pension Portability and Preservation: Summary
Hearing on Trends and Issues Related to Pension and Welfare Benefit Plans
Before the House Select Committee on Aging Subcommittee on Retirement Income and
Employment, July 27, 1990

Joseph S. Piacentini, Research Associate, Employee Benefit Research Institute (EBRI)

Workers with long tenure at one job may receive larger retirement benefits than workers with identical pension coverage who change jobs more frequently. Retirement benefit gains from long tenure are the result of vesting, adjustment of deferred annuity amounts for pay increases, and lack of cash-out opportunities.

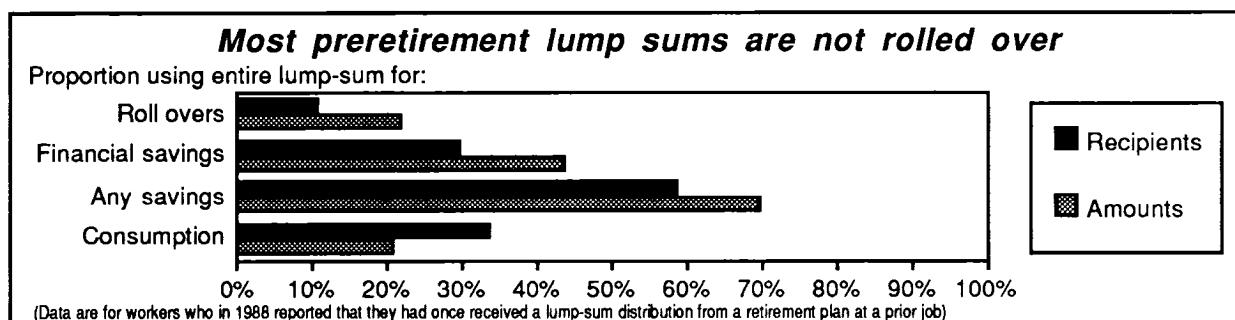
Current levels of job mobility and vesting delays result in only small retirement benefit losses in the private sector, on average. Therefore, shorter vesting would add little to the retirement income of private pension participants for all but the most mobile workers. More significantly, because deferred annuities are not adjusted for pay increases following job changes, EBRI estimates that common rates of job change can reduce benefits by more than 40%.

The potential for retirement benefit losses due to cash-out opportunities is large and growing. If all benefits were cashed out, workers who spend the distributions could lose three-fourths of their retirement benefits under a defined contribution plan, or one-third under a defined benefit plan, EBRI estimates. Moreover, preretirement cash outs are becoming more common, and few recipients roll these distributions into a tax-favored retirement plans.

In 1988, one-fourth of full-time private-sector workers were eligible to receive an immediate distribution if they left their current job. Half of those with a vested benefit from a past job had already received the entire benefit in the form of a lump sum.

Among workers in 1988, more than 8 million had received preretirement lump-sum distributions. The amount they received averaged \$6,800 and totalled more than \$48 billion.

Slightly more than one of every ten recipients rolled their entire distribution into another retirement plan (usually an individual retirement account (IRA)). Three in ten used the entire distribution for financial savings (including retirement plan rollovers, savings accounts, stocks, etc.), and six in ten used the entire amount for some kind of savings (including financial savings, home purchase, starting or buying a business, and debt payment). Just over one-third spent the entire distribution (on living expenses, education, cars, or other uses) (See chart).



Complete rollovers were most common among recipients aged 55 or over (28%), recipients receiving distributions of \$10,000 or more (22%), and recipients earning \$50,000 or more in 1988 (22%). Because larger distributions were more likely to be rolled over, completely-rolled distributions accounted for 22% of the money received (compared to 11% of recipients).

Evidence suggests that rollovers gained popularity following the establishment of IRAs in 1974 and throughout the late 1970s and early 1980s. It is too early to know whether these gains continued during the late 1980s (following the Tax Reform Act of 1986), but it is clear that rollovers remain the exception rather than the rule.

If all lump-sums reported to the Census in 1988 had been rolled over, the average amount received could have grown from \$6,800 to between \$13,900 and \$19,800 by age 65, after inflation.

Introduction.....	.2
How Portability and Preservation Affect Retirement Benefit Levels	3
Vesting Requirements.....	4
Erosion Due to Inflation	4
Cash-Out Opportunity.....	5
The Effect of Job Mobility on Deferred Annuity Values.....	6
A Simple Hypothetical Model.....	6
More Sophisticated Models.....	7
The Prevalence of Post-Separation Benefit Increases	9
The Effect of Cash-Out Opportunities on Retirement Income.....	10
Prevalence of Lump-Sum Distributions	10
Implications for Retirement Income Levels	11
The Receipt and Use of Lump-Sum Distributions.....	12
Interpreting the Data	13
Who Has Received Lump-Sum Distributions?	13
Potential Accumulation of Retirement Assets from Lump-Sum Distributions.....	15
Uses of Lump-Sum Distributions.....	16
Alternative Approaches to Portability and Preservation Reform.....	19
Conclusion	25

INTRODUCTION

There are several steps between employment and pension receipt in retirement. First, a worker must work for an employer that offers a plan. Next, the worker must become an active participant and accrue a benefit under the plan. Whether accrued benefits will eventually translate into retirement income depends on two additional steps: portability and preservation. *Portability* refers to a worker's ability to carry the value of any benefits accrued under an employer-sponsored pension plan with him or her when changing jobs. The process of maintaining a portable pension benefit until retirement is referred to as *preservation*. These latter two steps are the subject of this testimony.

American workers typically hold several jobs during the course of their careers. Yet, owing to the design of most employer-sponsored retirement plans, an employee who changes jobs may ultimately receive lower retirement benefits than one with an identical earnings history and equivalent retirement plan coverage who remains at one job—in other words, pension benefits often are not fully portable. Research has documented that workers who change jobs with typical frequency often receive lower retirement benefits than those who pursue otherwise identical one-job careers.¹

Moreover, portability alone is not sufficient to ensure that benefits accrued before a preretirement job change will eventually translate into retirement income. Even if benefits are fully portable—that is, if the participant carries the full value of the accrued benefit with him or her when changing jobs—retirement income may be eroded if its value is not preserved until retirement.

Retirement policy debates are giving increasing attention to the importance of preservation. Increasingly, retirement plan participants who leave their jobs before retiring receive the value of their accrued benefits in the form of immediate lump-sum

¹Portability issues are sometimes tied to assertions that the American work force is becoming more mobile and/or that the potential for retirement income gains from long tenure discourages mobility. However, available evidence suggests that such assertions may be unfounded. For example, the proportion of nonfarm employees who had at least 10 years of job tenure increased from 27 percent in 1983 to 28 percent in 1988, while the proportion with at least five years of tenure remained constant at 45 percent. Moreover, disagreement exists over the extent to which potential retirement income gains from long tenure actually discourages mobility. Allen, Clark, and McDermed (April 1989) point out that workers with pensions exhibit less mobility than workers without pensions. Their study concludes that pension losses from preretirement job termination can be high and probably result in lower voluntary attrition. However, Gustman and Steinmeier (1987) find that the lower mobility of workers with pensions is mainly attributable to superior nonpension compensation common at pension-covered jobs rather than to pension losses from mobility.

distributions. While these distributions often represent fully portable benefits, available evidence suggests that workers often fail to preserve these benefits' full value until retirement.

The disparity between actual retirement benefits and hypothetical benefits that might be achieved following a one-job career is sometimes characterized as a "portability loss" that affects workers who change jobs. However, a large proportion of job changes are voluntary and are presumably regarded by the workers as producing a net economic gain. When job changes are involuntary, the portability losses probably represent only one (and possibly not the largest) of the economic losses involved. Therefore, it may be appropriate to focus instead on the potential gains in retirement income that could result from enhanced portability and preservation. A worker who fully vests gains relative to one who does not; a worker who preserves a lump-sum benefit until retirement also gains.

Policy issues related to the preservation and portability of retirement benefits go beyond retirement income security to questions of benefit equity for more mobile workers, international competitiveness, and national savings rates. Portability and preservation policies that further goals in one of these areas may not further those in another; therefore, it is important to establish priorities among these goals before choosing policy directions.

This testimony provides evidence on the implications of portability and preservation policy for retirement income. It begins by describing the provisions in plan design and pension law that contribute to the disparity between actual retirement benefit levels received by mobile workers and hypothetical levels that could be received by workers who remained with one job. Next, the discussion provides quantitative evidence on the degree of portability and preservation achieved under current policies. It evaluates portability under defined benefit plans, using hypothetical models. To assess the degree to which portable lump-sum benefits are preserved, this testimony reports new findings on the receipt and use of preretirement lump-sum distributions. It documents trends in the receipt of these distributions, projects the potential accumulation of assets from the roll overs, and examines the reported uses of these distributions. Finally, this testimony reviews portability and preservation policy approaches and the implications and costs associated with these approaches.

How Portability and Preservation Affect Retirement Benefit Levels

Three basic features of plan design contribute to the disparity between actual retirement benefit levels and hypothetical one-job benefit levels: vesting

requirements, lack of inflation adjustment following preretirement job change, and cash-out opportunities. At least some of these features are characteristic of nearly all retirement plans, including those sponsored by private companies, by state or local government entities, and by the federal government.

Vesting Requirements

Both public- and private-sector employer-sponsored plans typically impose some vesting requirements based on years of service. Workers who change jobs or retire before fulfilling vesting requirements forfeit all unvested benefits. Retirement income gains are therefore associated with long job tenure, which is associated with full vesting.²

Erosion Due to Inflation

With very few exceptions, neither public-sector nor private-sector defined benefit pension plans adjust benefits for inflation that might occur in between preretirement job change and commencement of benefit payments at retirement. Therefore, the value of deferred annuities can be eroded by inflation after workers change jobs.

Defined benefit pension plans generally provide for a stream of benefit payments beginning at a specified retirement age, according to a formula based on final pay or a negotiated flat dollar amount and length of service. When a vested defined benefit plan participant leaves his or her job prior to reaching retirement age, the benefit promised to that worker is locked in, based on his or her current pay or the flat dollar amount specified by the plan. Had the worker stayed on the job until reaching retirement age, his or her pay or the flat dollar amount would typically have been adjusted upward during the intervening years to account for inflation (and possibly for some real increase in compensation). By leaving the job prior to retirement, the worker forgoes any such adjustment, and the value of the promised benefit may be eroded by inflation. Viewed another way, a defined benefit plan participant stands to gain from job stability, particularly from long tenure at a final job followed by immediate retirement.³

²Delays until full vesting generally cannot exceed 7 years under private plans and rarely exceed 10 years in public plans.

³Defined benefit plans, therefore, are often characterized as being "back-loaded." Although the law requires that benefits accrue steadily over a worker's career in nominal terms, in an environment with inflation (and/or real compensation increases) the real value of benefits accrued late in a worker's career will be greater than the value of benefits accrued earlier, all else being equal.

A "career-average" type of defined benefit plan, which bases benefits on average salary over a worker's entire career, is generally not back-loaded. Under this plan, a

Defined contribution retirement plans do not provide for specified deferred annuities and therefore are not subject to the same type of inflation erosion as defined benefit plans. Under a defined contribution plan, contributions—rather than benefit payments—are specified according to a formula or rule, and benefit amounts depend on contributions and investment returns. Vested participants who leave their jobs typically receive their account balances as immediate lump sums. As long as investment opportunities comparable with those offered within the plan are available to workers outside the plan, changing jobs need not reduce the expected value of the accrued benefit at retirement.

Cash-Out Opportunity

Any vested retirement benefits distributed to an employee prior to retirement may be consumed rather than saved to provide for retirement income. Some workers who participate in employer-sponsored retirement plans are permitted or required to cash out their vested retirement benefits when they leave their jobs prior to retirement. These lump-sum distributions are common under private-sector defined contribution retirement plans and are increasingly available under private-sector defined benefit plans. Some public-sector plans also provide for lump-sum distributions.

Lump-sum distributions are typically paid directly to the employee, who then has the option of investing the distribution on a tax-deferred basis in an account earmarked for retirement. Alternatively, the employee may pay regular income tax plus a 10 percent penalty tax on the distribution and use the remaining distribution for current consumption or some other form of investment.⁴

worker changing jobs receives benefits equal to those of a worker remaining at one job, all else being equal. Such plans are generally less common than final-pay and flat-dollar plans, covering 17 percent of full-time defined benefit plan participants in medium-sized and large private establishments in 1988 (U.S. Bureau of Labor Statistics, 1989).

⁴Employer contributions to qualified plans are not included in taxable income, and many employer-sponsored retirement plans now provide for before-tax employee contributions. Moreover, the earnings on retirement plan account balances are not taxed on a current basis. Therefore, taxes are generally due when lump sums are paid. However, an employee can continue to defer taxes by rolling the distribution into an IRA or a qualified employer-sponsored retirement plan that accepts roll overs. In addition, the 10 percent penalty tax is not imposed if the worker has died, become disabled, or has reached age 59 1/2. Other special provisions may apply. For more information on the taxation of lump sums, see Employee Benefit Research Institute, *Fundamentals of Employee Benefit Programs*, fourth ed. (Washington, DC: EBRI, 1990), and Frank

Preretirement erosion of lump-sum values through consumption, loss of tax deferral, payment of the penalty tax, and/or poor investment results can erode potential retirement income.⁵ Therefore, without preservation, portable benefits may not contribute to retirement income security. In contrast, lump-sum recipients who save their entire portable benefit on a tax-deferred basis until retirement and achieve reasonable investment returns can realize retirement income gains.

The Effect of Job Mobility on Deferred Annuity Values

The effect of job mobility on deferred annuity values can be substantial. Research conducted by the Employee Benefit Research Institute (EBRI) (Andrews, 1987) has shown that because deferred benefit amounts are not adjusted to reflect pay increases following separation from service, defined benefit plan participants with typical patterns of mobility may receive benefits 43 percent to 46 percent lower than otherwise identical participants pursuing one-job careers. Hay/Huggins Company, Inc. and Mathematica Policy Research (July 1988) estimate that due to that lack of adjustment and vesting requirements, 59 percent of private pension participants face losses averaging 23 percent relative to the one-job career ideal. These findings are detailed below.

A Simple Hypothetical Model

To evaluate the potential threat to retirement security from the erosion of deferred annuity values under defined benefit plans due to job mobility, and the potential gains to retirement income that might be achieved by enhancing this type of portability, it is useful to assess the magnitude of the disparity between multiple-job and one-job career benefit levels under hypothetical circumstances. Table 1 presents the results of

McArdle, "The Tax Treatment of Pension and Capital Accumulation Plans," *EBRI Issue Brief* no. 82 (September 1988).

⁵It is sometimes argued that, viewed from the perspective of life-cycle spending and saving patterns, not all consumption of lump-sum distributions is necessarily detrimental to retirement income security. In theory, individuals expecting pension benefits in retirement might reduce their net saving to achieve the same life-cycle spending and saving patterns that they would have chosen if the value of the deferred pension benefit had instead been paid as current compensation. However, there is disagreement over how closely actual behavior follows the life-cycle model. Moreover, the application of the life-cycle model to preservation issues is complicated by the favorable tax treatment granted to distributions that are rolled over into tax-qualified accounts relative to those that are not. Empirical evidence suggests that pension savings are not fully offset by reductions in other savings (Davis, 1989). Therefore, it is reasonable to conclude that a policy that successfully encouraged preservation might enhance the retirement security of workers receiving preretirement lump sums.

a simple hypothetical model of the effects of job changing on the value of vested benefits under a defined benefit plan. The model compares the monthly annuity benefits achieved by a worker who holds one job for 30 years with those of a worker who holds three 10-year jobs. Both are assumed to retire immediately following 30 years of total service. The workers are assumed to participate throughout their careers in a defined benefit plan that provides annual benefits equal to 1.5 percent of final pay times years of service under the plan, and all benefits are assumed to fully vest. Starting pay is assumed to be \$30,000 per year, inflation is assumed to be 4 percent annually, and real pay is assumed to increase by 1 percent annually. All dollar figures are adjusted for inflation and presented in constant dollars.

The potential effect of inflation on the value of deferred annuities is illustrated clearly by the current value of credit for the first 10 years of service after 10 years, 20 years, and 30 years. For the worker keeping one job for 30 years, the value of that credit increases in proportion to pay from a monthly annuity of \$410 after 10 years to \$500 after 30 years. The value of the same first 10 years of service for the worker holding three 10-year jobs is also \$410 after 10 years. However, after 10 years that worker changes jobs, so instead of increasing in proportion to pay, the real value of those 10 years of service falls as a result of inflation, reaching \$187 after 30 years. A similar process affects the value of the annuity attributable to the second 10 years of service for each worker. Only the value of the final 10 years of service, after which both workers immediately retire with the same final pay, is the same for both workers. After 30 years, the total monthly annuity payable to the worker keeping one job is \$1,501; the combined annuity payable to the worker holding three jobs is \$994.

More Sophisticated Models

More sophisticated models confirm that disparities between actual benefit levels and hypothetical one-job career benefit levels can be substantial. Most workers hold more than three jobs over the course of their careers, so disparities may be larger than those implied by the simple model. However, workers also tend to have longer tenure at the jobs they hold late in their careers, which could make the disparities smaller.

Andrews (1987) demonstrated the economic consequences of pension portability, using a simulation model.⁶ For defined benefit plans that base benefits on final average pay, the simulation indicated that a worker holding one job for 40 years would receive

⁶The simulation model used by Andrews was developed in a series of studies by Clark and McDermed (1986) and by Allen, Clark, and McDermed (1986). Specific simulations were run for Andrews' study by Clark and McDermed (1987).

substantially higher benefits than one holding four jobs of increasing tenure over 40 years, based on the real present value of the annuity stream available at retirement. If each plan provided benefits as an annuity stream beginning at retirement, the discrepancy would range from 46 percent for a typical male production worker to 43 percent for a typical male professional in the financial sector or female professional in the retail sector. If benefits instead are cashed out on separation from service and rolled over into retirement accounts, the discrepancy would vary according to the returns achieved. If the returns are near the overall market level, the expected discrepancy would not differ substantially from the annuity payment case.⁷

Hay/Huggins estimated the potential effect of various portability and preservation policy changes on retirement income, using a model that incorporated data on current job mobility and pension coverage patterns. Baseline estimates assumed that benefits were not cashed out on separation from service and that all vesting was five-year cliff. Hay/Huggins estimated that portability losses⁸ amounted to 15 percent of lifetime benefits for the average worker with private pension coverage at each employer. Forty-one percent of these workers would have suffered no loss, as they were expected to stay at one employer 35 or more years. Among the 59 percent of covered workers with a portability loss, the average loss was 23 percent—the equivalent of \$5,000 of annual pension benefits in 1988 dollars. The largest losses ranged from 40 percent to 49 percent and were associated with workers who changed jobs more frequently and later in their careers.⁹

Hay/Huggins estimated that requiring full and immediate vesting would affect covered workers' average portability losses by less than one percentage point. However, the model generally did not include extreme cases of job mobility, where the effect would be larger.

The Hay/Huggins model attributed most portability losses to the erosion of deferred annuity values by inflation. If plan sponsors adjusted vested benefits of separated participants for inflation, the average portability loss facing covered workers

⁷This is because the process of converting deferred annuities to lump sums is based on an expected nominal discount rate. Therefore, like deferred annuities, converted lump sums do not adjust benefit levels for future inflation.

⁸Including losses due to both failure to vest and erosion of deferred annuity values, measured against hypothetical one-job benefit levels.

⁹Hay/Huggins points out that their model reflects only primary plan coverage. About 40 percent of covered workers in the model were also covered by one or more supplemental plans. Because these supplemental plans are typically defined contribution plans that can provide fully portable benefits, some of the reported portability losses would be offset if these supplemental benefits are preserved.

would have fallen from 15 percent to 5 percent, and the proportion suffering any loss would have declined from 59 percent to 41 percent. Only 3 percent of covered workers would face losses greater than 19 percent. Hay/Huggins also reported that if final employers gave credit for covered service at previous employers, all portability losses might be eliminated. The same would generally be true if all plans were defined contribution plans; only losses due to failure to vest would remain. In either case, however, if benefits were cashed out prior to retirement, the potential for preservation losses would remain.

Hay/Huggins pointed out, however, that the model's findings should be regarded as rough approximations. Moreover, they warned that portability reforms that might lead to significant gains in retirement benefits would also significantly raise the cost of sponsoring defined benefit plans and therefore possibly discourage sponsorship. For example, Hay/Huggins cited a Congressional Budget Office estimate that indexation of deferred vested benefits for inflation would increase typical defined benefit plan liabilities 6 percent to 28 percent.

The Prevalence of Post-Separation Benefit Increases

The erosion of deferred annuity values under a final-pay or flat-dollar defined benefit plan may be mitigated if the plan grants a cost-of-living adjustment to separated vested participants at a later date. However, although many public-sector plans and some private-sector plans provide for some inflation adjustment following retirement, virtually none adjusts benefits to offset inflation that occurs in between separation from service and commencement of benefit payments.

In 1988, roughly one-fourth of full-time defined benefit plan participants in medium-sized and large private establishments were in plans that granted at least one ad hoc postretirement annuity increase during the 1983–1987 period, according to the U.S. Bureau of Labor Statistics (1989). A 1989 survey of 456 companies with defined benefit plans found that one-third had granted a postretirement pension increase to salaried retirees since January 1, 1985 (Hewitt Associates, 1989). Federal pensions provide for automatic postretirement cost-of-living adjustments (COLAs). In 1987, one-half of full-time participants in state and local government pension plans were in plans that provided automatic postretirement COLAs, and one-third were in plans that granted at least one ad hoc postretirement annuity increase during the 1982-1986 period, according to BLS (1988).

But among the 456 companies surveyed by Hewitt Associates in 1989, just 1 percent of those providing any benefit increase extended their most recent increase to

separated vested workers not yet receiving benefits. Federal pensions similarly do not adjust benefits for inflation in between separation and commencement of benefit payments. Informal reports from public-sector pension experts confirm that this practice is virtually unheard of among state and local government pension plans as well.

The Effect of Cash-Out Opportunities on Retirement Income

Preservation of portable retirement benefits is becoming central to the retirement income security of a growing number of American workers.

As noted, lump-sum distributions represent a portable benefit. In the case of defined contribution plans, such distributions represent full portability, as the expected value of the accrued benefit at retirement is not diminished if distributions are rolled over following separation from service. Under a defined benefit plan, the conversion of a deferred annuity to a lump sum does not adjust for expected future inflation; therefore, the expected value of the benefit at retirement can be reduced by separation from service prior to retirement. (However, the lump sum may provide benefits superior to those offered by the deferred annuity, particularly if future inflation exceeds the plan's expectations.¹⁰) Nonetheless, the amount distributed represents a portable benefit.

Importantly, whether received from a defined benefit or a defined contribution plan, the contribution that a lump sum paid directly to an individual will make to retirement income is contingent on preservation.

Prevalence of Lump-Sum Distributions

Preservation is growing in importance in large part because evidence suggests that lump-sum distributions are becoming more common. Between 1983¹¹ and 1988, the proportion of all workers who reported having received a lump sum from a plan at a prior job increased from 6.6 percent to 7.5 percent, while the proportion of all those who participated in a plan at a prior job who reported such a distribution increased

¹⁰The lump sum may provide an ex post benefit of greater or lesser value than the deferred annuity, depending on whether the rate of return eventually realized on the lump-sum asset exceeds or falls short of the discount rate used by the plan to convert the annuity to a lump-sum. Nominal rates of return (on many investment instruments other than long-term bonds) are widely believed to rise and fall with inflation over the long run, providing a relatively constant and modest real rate of return. Therefore, if future inflation exceeds the plan's expectations, future nominal rates of return will likely exceed the plan's discount rate. In that case, by rolling over the lump sum, the participant may achieve a retirement benefit superior in value to that offered by the deferred annuity. Hence, a lump-sum conversion could provide a participant with protection against unexpected inflation. Of course, investment returns may be affected, either positively or negatively, by any number of factors in addition to inflation.

¹¹All 1983 data are taken from Atkins (1986).

from 39 percent to 43 percent.¹² Moreover, a large proportion of the most recent distributions received by today's workers were received very recently. In May 1988, 41 percent of lump-sum recipients indicated that their most recent distribution was received after 1984.

In May 1988, one-fourth of all full-time private-sector workers reported current eligibility to receive a lump-sum distribution from a retirement plan at their current job (that is, they were vested in a plan that provided for immediate lump sums on separation from service). Eight percent had received a distribution from a prior job, and nearly one-third had either received or were eligible to receive a lump sum. Among the 27 million full-time private-sector workers who were vested at their current job in May 1988, 22 percent were eligible only for a lump sum; among those vested at any prior job, one-half had already received their entire vested benefit in the form of a lump-sum distribution (chart 1).

Thirty-one percent of large private defined benefit plan sponsors offer lump-sum options to participants, according to a survey of 456 major employers (Hewitt Associates, 1989). Of the 142 employers offering lump-sum distributions, 63 percent offer immediate distributions to employees who separate from service prior to retirement (the remainder offer distributions only at early and/or normal retirement). Two-thirds of employers offering lump sums reported that more than one-half of eligible participants elected the option. And a large majority of these employers specify no maximum or minimum amounts for lump-sums.

Moreover, defined contribution plans in general, which unlike defined benefit plans traditionally pay benefits as lump sums, are gaining importance. Total participation in private defined contribution plans grew from 20 million in 1980 to 38 million in 1987, while defined benefit participation grew more modestly, from 38 million to 40 million (Turner and Beller, 1989).

As the proportion of retirement benefits that are paid out prior to retirement in the form of lump sums increases, the question of whether these benefits are preserved for retirement income purposes will increase in importance. The potential implications for retirement income security and related public policy are substantial.

Implications for Retirement Income Levels

Andrews' estimates suggest that a hypothetical worker holding four jobs with increasing tenure over 40 years, with constant defined contribution plan coverage,

¹²Although these increases are small, they are nonetheless statistically significant at the 90 percent level.

would lose 77 percent of the value of his or her benefit for retirement by spending the preretirement distributions rather than rolling them into a tax qualified account at a moderate nominal interest rate (8.5 percent). The effect of spending preretirement distributions from final-pay defined benefit plans rather than rolling them over at a similar interest rate would be smaller. Because final-pay plans are back-loaded, the plan at the final employer (from which the worker retires) would contribute disproportionately to retirement income, mitigating the loss. However, Andrews' estimates suggest that final-pay plan participants who spend their preretirement distributions will receive 33 percent to 36 percent less in benefits than workers who roll over such amounts. These estimates suggest that participants in both defined contribution and defined benefit plans that provide for lump sums can substantially increase their retirement income by preserving their preretirement distributions.

Hay/Huggins estimated that average portability losses of covered private workers would increase from 15 percent to 39 percent if all vested benefits from primary plans were cashed out and spent. However, Hay/Huggins estimated that only 25 percent of primary plans permit cash-outs of more than \$3,500. Therefore, if workers opt for and consume all lump sums available, the average portability loss would be 21 percent, rather than the 15 percent attributable to the erosion of the value of deferred annuities and failure to vest alone. Hay/Huggins concluded that restricting the cash-out of benefits from primary plans might have a large long-term effect on retirement income, as the trends toward wider availability of lump sums and greater prevalence of defined contribution plans are expected to continue.

Taken together, the Hay/Huggins and Andrews analyses suggest that the effect of preservation lapses on retirement income is already very substantial for some workers and will be of increasing importance to a growing number of workers in the future.

The Receipt and Use of Lump-Sum Distributions

While rollovers of lump-sum distributions are not mandatory, as discussed above, they are allowed and encouraged by the tax code. The degree to which workers currently realize retirement income gains by rolling their distributions into qualified retirement vehicles is therefore an empirical question. As part of both the May 1988 CPS EBS and the May 1983 CPS pension supplement, the Census Bureau collected data on the receipt and use of lump-sum distributions by civilian workers. Workers were asked whether they had ever received lump sums from a prior job. Those responding affirmatively were asked to report the amount of their most recent distribution, when

they received it, and how they used it. Some findings are summarized below. For comparison, all dollar figures represent constant 1988 dollars.

Interpreting the Data

The May 1988 CPS EBS cannot provide a comprehensive tally of preretirement lump sums received over the past several years. First, only individuals working in May 1988 were surveyed. Second, approximately 1 million workers reporting having received more than one lump sum were asked to provide detailed information only on their most recent lump sum. Third, while 8.5 million workers are estimated to have received lump sums, data on the amount of the lump sums are unavailable for 1.4 million of these recipients. (In addition, an estimated 363,000 workers failed to report whether they had ever received a lump sum.) Fourth, all lump sums in excess of \$99,999 (an estimated 37,000 distributions) were top-coded at that amount for purposes of the publicly available data.

In addition, it should be acknowledged that the lump sums considered here were received over many years, encompassing many changes in tax law and economic environment.

Nonetheless, available data represent more than \$48 billion in lump sums received by more than 8 million workers—a reasonably large scope for analysis. Moreover, because all lump sums reported were received by individuals subsequently working, the data can be reasonably interpreted to represent preretirement lump-sum receipt rather than retirement cash outs.

Who Has Received Lump-Sum Distributions?

In May 1988, 20 million civilian workers aged 16 or over (or 17 percent of all such workers) reported having been participants in a pension or retirement plan at a prior job. A total of 8.5 million workers (7 percent of all workers) reported having received at least one lump sum from such a plan; 1.1 million workers had received more than one lump sum. Among the 7.1 million lump sum recipients who reported the amount of their most recent lump sum, these distributions amounted to \$48 billion, or an average of about \$6,800 per recipient, in constant 1988 dollars.¹³

Table 2 summarizes the distribution of lump-sum recipients and amounts by selected characteristics. Most lump sums were of small amounts, but larger lump sums accounted for a large proportion of the total money received. One-half of lump sum

¹³Only 7.1 million LSD recipients reported the amount they received. All totals and averages reported here are for those recipients who reported the amount.

recipients reporting indicated that their most recent lump sum amounted to less than \$2,500. Just 7 percent had received \$20,000 or more. However, those receiving less than \$2,500 accounted for 9 percent of the total amount received, while those receiving \$20,000 or more accounted for 48 percent.

Men accounted for slightly more than one-half of all preretirement lump-sum recipients but reported receiving more than two-thirds of the total amount. The average reported lump sum amounted to \$8,600 for men and \$4,600 for women. This may reflect the fact that women tend to have shorter job tenure and therefore accumulate smaller lump-sum benefits, all else being equal.

Many workers reporting receipt of a lump sum from a prior job were quite young, but older workers accounted for a disproportionately large share of the total amount received. Two-thirds of lump-sum recipients were under age 45 in May 1988, but these workers accounted for 43 percent of the total amount received. The average size of the most recent lump sum received increased with the recipient's current age, from \$2,900 among recipients aged 25–34 in 1988 to \$18,900 among those aged 55–59. Viewed by the age at which the most recent distribution was received, a similar relationship is revealed. Six out of 10 recipients received their most recent distribution when they were under age 35, but these payments accounted for only one-third of the total amount received. The average size of distributions increased from \$4,100 for those received at age 25–34 to \$26,800 for those received at age 55–59. This increase reflects the fact that older workers are generally more likely to have longer tenure and higher earnings at prior jobs.

Most workers reporting lump-sum receipt had moderate earnings, and the average size of distributions at different earnings levels did not vary as sharply as the earnings. Those earning between \$10,000 and \$30,000 annually in 1988 accounted for 54 percent of all recipients and 48 percent of the total amount received. Those earning less than \$10,000 represented 13 percent of recipients and received 13 percent of the total amount distributed; the remaining 32 percent of recipients earned \$30,000 or more and received 39 percent of all dollars distributed. The average size of the most recent distribution received ranged from approximately \$3,300 for recipients earning \$5,000 to \$10,000 annually to more than \$10,000 for workers earning \$50,000 or more and workers earning less than \$5,000. The latter group is composed

largely of older, part-time workers, who may have had much higher earnings earlier in their careers.¹⁴

The average size of lump-sum distributions appears to have changed little over time. The average distribution received after 1984 amounted to approximately \$8,300 in constant 1988 dollars, compared with \$6,700 for 1980–1984, \$7,700 for 1975–1979, \$7,200 for 1970–1974, and \$6,600 for 1960–1969.

In summary, the number of workers receiving preretirement lump-sum distributions and the amount of money paid out in these distributions are substantial. A large proportion of lump sums are paid to workers at relatively young ages. This allows for ample opportunities to accumulate assets for retirement if lump sums are rolled over into qualified retirement accounts and preserved until retirement. The following paragraphs examine the potential for accumulation of assets from reported lump sums by age 65, followed by an analysis of how reported lump sums were used.

Potential Accumulation of Retirement Assets from Lump-Sum Distributions

If the entire amount of the most recent lump sums reported by workers in May 1988 were preserved until each worker reached age 65 and earned a conservative market return,¹⁵ the aggregate dollar amount involved would more than double, from

¹⁴Out of an estimated 284,233 LSD recipients earning less than \$5,000 in 1988, an estimated 53,666 (or 19 percent) received a most recent LSD of \$10,000 or more. Of these, 29,050 are estimated to have been aged 60 or over in 1988, and 30,964 are estimated to have been aged 55 or over when they received their most recent LSD. No low-earning recipient of a large LSD aged 60 or over in 1988 normally worked as much as 35 hours per week that year. Moreover, because these estimates are based on a small number of respondents, a relatively large degree of sampling error may be present. The 90 percent confidence interval for the proportion of LSD recipients earning less than \$5,000 in 1988 whose most recent LSD amounted to \$10,000 or more is approximately 10 percent to 27 percent.

¹⁵Rates of return applied to LSD amounts are based on long-term historical real returns reported by Ibbotson Associates (1989) for various types of investments. Weighted average real returns for each year were calculated using the asset mix reported for 401(k) plans in 1986 by the U.S. General Accounting Office (GAO, 1988), excluding very small proportions reportedly invested in life insurance, real estate, options and future, and amounts invested in "other." The more conservative return assumptions also exclude the 30 percent reportedly invested in company stock, because some of this may represent in-kind employer contributions rather than participant choices. The more aggressive assumptions include employer stock. GAO categories were matched to the Ibbotson series, respectively, as follows: guaranteed interest instruments to 90-day Treasury bills, company stock to common stock, balanced funds to one-half common stock and one-half long-term corporate bonds, equity funds to common stock, money market funds to 90-day Treasury bills, government bonds to long-term government bonds, marketable bonds to long-term corporate bonds, and index funds to common stock. The resulting mixes applied for the more conservative and more aggressive strategies are, respectively, common stock, 27 percent or 51 percent; 90-

\$48 billion to \$99 billion in constant 1988 dollars. The average amount potentially available at retirement bears a weaker positive relationship to the age at which the worker received the distribution than does the amount originally paid out. This occurs because, although older recipients are likely to have received larger distributions from longer-tenure jobs, the younger recipients have longer before retirement to earn investment returns on the amount received. As shown in table 3, a recipient aged 25–34, having received on average \$4,100, could accumulate an average of \$10,500 for retirement, in constant 1988 dollars. Under more aggressive investment strategies, the growth in the aggregate amount available for retirement and the average amount per recipient could be larger. The potential gains to lump-sum recipients' retirement income from preservation could be substantial.

Uses of Lump-Sum Distributions

The May 1988 CPS EBS asked lump-sum recipients to indicate whether they had put any portion of their distribution to the following uses: (1) invested in an IRA; (2) invested in an insurance annuity or other retirement program; (3) invested in a savings account; (4) invested in other financial instruments; (5) started or purchased a business; (6) bought a house or paid off a mortgage; (7) bought a car; (8) paid off loans or other debts; (9) paid educational expenses for self or others; (10) paid expenses during a period of unemployment; and (11) used for other purposes. Respondents were not asked to indicate how much of their distribution was applied to each use.¹⁶ For

day Treasury bills, 56 percent or 38 percent; long-term corporate bonds, 12 percent or 8 percent; and long-term government bonds, 5 percent or 3 percent. Past potential returns for each year prior to 1988 were calculated using the assumed real returns for each year since the LSD was received.

If the year the LSD was received was not reported, it was assumed to have been received when the current job was started, based on reported current tenure. If neither the date of receipt nor that of tenure were reported, no past returns were accumulated. Where the recipient's current age was over 65, returns were nonetheless computed until 1988. For workers under age 65 in 1988, future potential returns were based on the long-term historical real returns from the constructed series: 2.3 percent annually for the more conservative mix and 3.7 percent annually for the more aggressive mix. These returns were accumulated based on the number of years until the worker would reach age 65.

¹⁶The May 1983 Current Population Survey employee benefit supplement also asked LSD recipients to indicate whether they used any of their LSD for selected purposes. Fewer alternative uses were included in the 1983 questionnaire than in the 1988 questionnaire; as a result, in 1983, 63 percent of LSD recipients indicated that they used at least part of their LSD for unidentified "other" uses. Choices were expanded in 1988 in part to help identify the uses underlying these reported "other" uses. For a discussion of the 1983 findings, see Andrews (1985) and Atkins (1986).

purposes of the following analysis, options (1) and (2) will be considered tax-qualified financial savings; options (1) through (4) will be referred to as financial savings; options (1) through (6) and (8) will be classified as savings broadly defined; and options (7) and (9) through (11) will be considered consumption.¹⁷

In May 1988, 11 percent of lump-sum recipients indicated that they placed at least some of their most recent distribution in an IRA (table 4). More than 2 percent indicated that they transferred some portion of the distribution to an insurance annuity or other retirement plan. The most popular uses among lump-sum recipients were savings accounts (17 percent), paying loans or other debts (22 percent), and other uses (27 percent).

Thirteen percent of recipients reported using at least some of their distribution for tax-qualified savings. At least some savings—broadly defined—were reported by 65 percent of recipients. Some consumption was reported by 40 percent of all recipients, while 30 percent reported some discretionary consumption.¹⁸

Tax-favored savings were generally most prevalent (and consumption least prevalent) among workers nearing retirement age when they received the distribution; workers receiving larger distributions; and workers with higher earnings, family incomes, and education levels. Some tax-qualified savings were reported by 36 percent of those receiving lump sums at age 55 or over, compared with 4 percent of those receiving lump sums at age 16–24. Twenty-seven percent of those receiving distributions of \$20,000 or more saved at least part of that amount on a tax-deferred basis, as did 6 percent of those receiving distributions of less than \$2,500. Some portion of distributions paid to one-fourth of all recipients earning \$50,000 or more in 1988 was saved on a tax-qualified basis, whereas 7 percent of recipients earning less than \$10,000 reported such saving.

¹⁷Assets reported saved may have subsequently been spent or may be spent in the future.

¹⁸The 1983 survey findings presented by Andrews (1985) and Atkins (1986) suggested lower levels of saving and higher levels of consumption. This may be because some potential uses identified separately in the 1988 questionnaire and classified here as savings broadly defined may have been reported as "other" uses in 1983 and classified as consumption in prior work. Uses not identified separately in 1983 include "used to start or purchase a business" (reported by 3 percent of recipients in 1988) and "paid loan or other debt" (reported by 22 percent). In addition, the 1983 choice "bought house" (reported by 10 percent in 1983) was expanded to ask "bought house or paid mortgage" (reported by 9 percent in 1988) and the 1983 choice "invested in other financial instruments" (reported by 17 percent in 1983) was broken into "savings account" (reported by 17 percent in 1988) and "invested in other financial instruments (e.g., stocks, money market accounts)" (reported by 6 percent in 1988).

Changes in the law pertaining to preretirement lump-sum distributions may have increased the popularity of tax-favored uses. IRAs, first established under ERISA in 1974, and marketed heavily by banks and other institutions following the extension of IRA deduction eligibility to all workers in 1981, have grown in popularity as a vehicle for tax-favored lump-sum roll overs. Just 3 percent of lump-sum recipients who received their distribution prior to 1970 reported any tax-favored savings; in contrast, 13 percent of those receiving their lump sum during the period 1980-1984 reported some such savings—a statistically significant increase. The imposition under the Tax Reform Act of 1986 (TRA '86) of a 10 percent penalty tax on preretirement lump sums that are not rolled over (effective for tax year 1987) may have bolstered this trend. Twenty percent of those receiving their lump sums during 1987 reported some tax-favored saving, up from 18 percent in 1986. However, the margin for error in these estimates is too large to support the conclusion that the use of tax-favored savings alternatives by lump-sum recipients increased following TRA '86.

Eleven percent of lump-sum recipients reported only tax-qualified retirement uses for their distributions. Presumably, the other 89 percent paid current income tax and, for distributions received prior to retirement and after 1986, the 10 percent penalty tax on at least part of their lump sums (table 5). Thirty percent reported only financial savings, and 59 percent reported only savings broadly defined. Nonetheless, 34 percent indicated only consumption for their distributions, and 25 percent reported only discretionary consumption. Five percent indicated some mix of savings and consumption.

Because larger distributions are more likely to be saved on a tax-qualified basis than smaller ones, the proportion of lump-sum monies used for tax-qualified saving is larger than the proportion of recipients reporting such saving. In contrast, the 11 percent of lump-sum recipients who reported only tax-qualified uses accounted for 22 percent of the total amount distributed (table 6). The 34 percent of recipients reporting only consumption accounted for 21 percent of total distributions.

The foregoing evidence suggests that a relatively small proportion of total lump-sum amounts are currently preserved on a tax-favored basis. Larger distributions and those received later in a career are more likely to be invested in tax-qualified retirement accounts. However, the fact that younger recipients and those with lower earnings are less likely to opt for preservation may indicate that some younger and lower-earning workers are not adequately planning for their retirement security. While further research is needed, it appears that there is a substantial potential for further retirement income gains from enhanced preservation.

Alternative Approaches to Portability and Preservation Reform

Public policy interest in portability and preservation of retirement benefits appears to be growing, in large part owing to concern about retirement income security. Lapses in portability and preservation may limit the ability of mobile workers to achieve income supplementation from employer-sponsored plans in retirement. Some policymakers have expressed concern that this could undermine retirement income adequacy and ultimately put pressure on Congress to raise Social Security benefits.

In addition to retirement income security, other goals sometimes put forward for pension portability and preservation policies are benefit equity for more mobile workers, enhanced international competitiveness, and increased national savings rates. Approaches that might further one or more of these goals may be inconsistent with retirement income security. Therefore, to select an appropriate policy, priorities must be set among these potentially conflicting goals.

The disparity between the benefit levels that can be realized by mobile workers and those that are attained by one-job career workers (all else being equal) is sometimes characterized as not only a threat to retirement income adequacy but also as a source of inequity afflicting mobile workers. Because some of these disparities are attributable to a failure to fully vest, faster vesting might be seen as helping to correct this perceived inequity. Other disparities are attributable to the erosion of deferred annuity values by inflation, possibly implying that deferred annuities should be indexed. Because deferred-annuity disparities do not occur in defined contribution plans, a move toward these plans is sometimes proposed as a way to promote equity.

In terms of international competitiveness, it has been argued that, because retirement income gains are associated with job stability, workers are being given incentives to remain at their current jobs beyond the point at which job changes would be more efficient from the standpoint of the overall economy.¹⁹ If workers are in fact less mobile than such economic efficiency criteria would dictate, economic growth and international competitiveness may be impaired. The policy implications of this immobility are similar to those of the mobile-worker equity issue, since it is this perceived inequity which purportedly impedes mobility.

If national savings were the overriding goal, workers might be encouraged to save more by a policy allowing unrestricted tax-deferred saving.

¹⁹Some researchers believe that this effect is negligible. See footnote 1.

Care must be taken in considering the potential impact of portability and preservation policy reforms directed at any one or more of these goals. In particular, to assess fully the potential for retirement income gains achievable by additional reform, it is necessary to consider who will bear the costs. Because plan sponsorship and sometimes plan participation are voluntary, reforms that increase plan costs to sponsors and/or participants may have unintended negative effects on retirement income security.

There are several possible legislative approaches to portability and preservation reform, including further restrictions on preretirement consumption of lump-sum distributions, the tightening of vesting standards, and measures to prevent the erosion of deferred annuity values by inflation. This testimony does not seek to endorse any particular approach but instead to highlight some of the possible implications of various approaches.

Further Restricting Preretirement Access to Retirement Benefits—Further restrictions on preretirement access to retirement benefits might result in greater preservation of portable retirement benefits, which would benefit retirement income security. Such restrictions could involve a complete prohibition against preretirement distributions to individuals (possibly with an exception for financial hardship). Moreover, all distributions could be required to take the form of lifetime annuities. Alternatively, rollovers and preservation could be further encouraged by requiring defined contribution plans to accept rollovers, by permitting direct trustee-to-trustee transfers of lump sums, or by raising the penalty tax on preretirement distributions.

Such proposals might also help boost the national savings rate. Empirical research suggests that a substantial proportion of pension assets represents additional savings rather than redirected personal savings. Requiring or further encouraging the preservation of pension savings might therefore contribute to national savings, to the possible benefit of the overall economy. And a growing, productive economy is considered essential to the retirement income security of America's aging population.²⁰

In each case, the potential costs of the restrictions and possible implications for plan sponsorship and participation must be assessed. Requiring defined contribution plans to accept roll overs might add to the administrative cost of plans that do not currently do so. And if the restrictions placed on lump-sum access lower the perceived value of the plan to participants, employers might find that their plans' effectiveness as a tool for recruiting and retaining employees is reduced. Both of these effects might

²⁰See Davis (1989).

serve to reduce employers' incentives to sponsor plans. Perhaps more importantly, in plans in which employee participation is voluntary and employee contributions are required, restricting access to the funds might make some employees more reluctant to participate or reduce the amount they contribute. Therefore, such restrictions might enhance retirement income security in some instances and erode it in others.

While restricting access to preretirement distributions might enhance preservation of portable benefits, it would not diminish the disparity between actual retirement benefits and hypothetical one-job career benefits that can result from failure to vest and/or the erosion of deferred annuity values by inflation.

Tightening Vesting Standards—Requiring shorter vesting schedules might enhance portability by restricting the forfeiture of accrued benefits by shorter-tenure participants.

However, requiring shorter vesting schedules would impose additional costs on plan sponsors. In particular, plan sponsors would face increased retirement plan costs for shorter-tenure employees, whose benefits would then become nonforfeitable. Moreover, because shorter vesting would directly reduce the retirement income gains associated with job stability (or losses associated with job mobility), it would reduce the usefulness of retirement plans as tools for retaining employees and rewarding long-service employees. Although aiding mobility is sometimes cited as beneficial to economic growth and international competitiveness, the effect on employers might be reduced incentive to sponsor a plan. Therefore, while some shorter-tenure workers would certainly gain from faster vesting, longer-tenure workers might suffer if total plan spending is held constant while more benefits shift to shorter-tenure employees. And some workers might lose due to potential declines in plan sponsorship.

In addition, shorter vesting might diminish preservation, to the detriment of retirement income security. Workers terminating after only a few years of service are likely to have accrued only a small retirement benefit. Current law permits private defined benefit plans to automatically cash out any vested benefits of terminating employees that would amount to lump sums of less than \$3,500. Small benefit cash-outs from defined contribution plans are also common. As will be seen later in this discussion, available evidence suggests that small distributions are rarely preserved. Therefore, although faster vesting might make portable benefits available to more workers, without preservation retirement income security might not be enhanced. If increases in small (and frequently unpreserved) distributions paid to shorter-term employees result in fewer or smaller deferred annuities payable at retirement, retirement security might decline.

Mandating the Adjustment of Deferred-Annuity Values for Inflation or Pay

Increases—Under a defined benefit plan, a disparity between actual retirement benefits and hypothetical one-job career benefits can result even when all accrued benefits are fully vested if the values of deferred annuities from jobs terminated prior to retirement are eroded by inflation.

Short of government subsidies, there are two basic approaches to eliminating the multiple-job/one-job disparity: (1) require that separated participants' vested benefits be adjusted for inflation (or future pay increases); or (2) require that defined benefit plans give participants credit for service at prior jobs.

Under the first alternative, plan sponsors might be required to adjust the annuity promised to separated vested employees for inflation between the time of separation and the time of retirement (and possibly after retirement as well). Or the plan sponsor might be required to cash out the deferred annuity based on its projected value (taking into account expected future pay increases) rather than on its current value as permitted under current law. (Preservation provisions might allow the cash-out to be paid directly to the employee or require some form of roll over.)

The second alternative generally would entail a transfer of funds from the defined benefit plan of the prior employer to that of the new employer, based on the current value of the deferred annuity promised by the former plan. Because the credit granted by the later employer for service with the prior employer would be valued according to final (probably higher) pay or a later (probably higher) flat-dollar amount, the amount transferred from the prior plan would generally be insufficient to cover the cost of the past-service credit. The later employer would be charged with making up the difference.

Both of these alternatives would increase the cost of sponsoring defined benefit plans for both private- and public-sector employers. The first would increase the cost associated with participants who separate prior to retirement by requiring the employer from which they separated to increase their benefits in response to circumstances encountered after their separation. The second would increase the cost associated with workers hired later in their careers by requiring their last employer to provide some benefit payments for service rendered to prior employers. Both of these might imply an incentive for preferential hiring: the first against young workers perceived as having a high likelihood of leaving long before retirement, the second against older workers with past service to be credited. Both would increase the overall cost of sponsoring a defined benefit plan and reduce the usefulness of the plan as a means of retaining employees and rewarding long service. Therefore, both might have a

negative impact on defined benefit plan sponsorship, encouraging more employers to opt instead for defined contribution plans. And, because defined contribution plans typically pay retirement benefits as lump sums, without preservation such a trend could erode retirement income security.

Require Lump-Sum Cash-Outs From Defined Benefit Plans, and Mandate Their Preservation—Plan sponsors could be required to cash out deferred annuity values in the form of lump-sum distributions when vested participants separate from service prior to retirement, and roll over of these distributions could be made mandatory. This approach might help protect participants from unexpectedly rapid inflation. If future inflation exceeds a plan's expectations, future nominal rates of return (on many financial instruments other than long-term bonds) will likely exceed the plan's discount rate. In that case, by rolling over the lump sum, the participant could achieve a retirement benefit superior in value to that offered by the deferred annuity. Hence, a lump-sum conversion could provide a participant with a hedge against unexpected inflation. (However, variations in investment results independent of inflation may also affect the eventual relative value of immediate lump-sum and deferred annuity benefits.)

Unlike indexation of annuity amounts and provision of past service credit, which entail substantial identifiable costs, mandatory cash-outs might be perceived by plan sponsors as not affecting costs. If, due to unexpected inflation, participants receiving cash-outs benefit relative to those receiving deferred annuities, this would imply some potential savings forgone by plan sponsors who provide cash-outs. If the sponsor had not cashed out the benefit, the plan's ultimate costs would have been lower, because the unexpected inflation would have devalued the plan's annuity obligations. However, because this outcome cannot be foreseen, as long as the discount rate used to convert the annuity to a lump sum reflects the plan sponsor's true expectations, such a reform should be perceived as cost-neutral. Moreover, this approach might entail some administrative cost saving, since the plan sponsor will not have to track separated vested participants.

It should be noted that while this approach might provide participants with some protection against unexpected inflation, it would not adjust benefits for expected inflation. In addition, it could expose separated vested participants to investment risks not associated with inflation. And, unlike annuity benefits, which typically include annuities for survivors, the income security provided by a lump sum can vary depending on the longevity of the beneficiary and any survivor, even absent inflation.

Permitting Only Defined Contribution Plans—Vested benefit values under defined contribution plans are not subject to inflation erosion due to job mobility. Because the expected retirement value of vested account balances is not reduced when employees change jobs, these benefits are generally regarded as fully portable. Therefore, if all employer-sponsored plans were defined contribution plans, one source of disparity between multiple-job and hypothetical one-job benefit levels would be eliminated. This might raise the potential retirement income level attributable to vested benefits from jobs held early in a worker's career.

However, such a policy could be detrimental to the retirement security of many defined benefit plan participants. In particular, defined benefit plans are sometimes regarded as a superior vehicle for retirement security for long-tenure employees—defined contribution plans place the risk of retirement fund investment performance on participants, while defined benefit plans shift this risk to the employer by promising a specified annuity. Moreover, because defined contribution plans traditionally pay benefits as lump sums, the potential for preretirement consumption of retirement funds by shorter-tenure employees might also be increased. Therefore, while switching to defined contribution plans exclusively might enhance portability, it could also exacerbate retirement income erosion due to shortcomings in preservation.

From the plan sponsor's perspective, the fact that defined benefit plans provide the most generous benefits to long-service employees makes these plans useful as a tool for retaining employees and rewarding long service. Some plan sponsors, if faced with a mandatory change in plan type, might not be inclined to incur a similar cost to sponsor a plan less suited to these goals.

Expanding Social Security—Unlike employer-sponsored retirement plans, Social Security Old Age and Survivors Insurance (OASI) provides fully portable benefits with the assurance of preservation. Credit for all Social Security-covered employment is given when calculating benefit amounts, and all benefits are payable only as a lifetime annuity (or joint lifetime annuity for the worker and the worker's spouse where appropriate) beginning at a specified retirement age. Therefore, expanding OASI, possibly at the expense of tax incentives for employer-sponsored plans, might be one way to enhance portability and preservation.

However, expanding mandatory OASI would limit employers' flexibility in designing compensation packages, to the possible detriment of labor market efficiency. Moreover, if such an expansion were financed through an increase in the payroll-based OASI tax, employers who could not offset the increase through reduced spending on

employer-sponsored plans would face increased labor costs, and employment or wage levels might suffer.

Finally, any shift from advance-funded employer-sponsored plans to an expanded pay-as-you-go Social Security system might adversely affect national savings (Davis, 1989).

Conclusion

A discrepancy exists between actual retirement benefit levels and those that might hypothetically be achieved over a one-job career or if benefits were fully portable and always preserved. Significant gains to retirement income might be achieved if both portability and preservation could be enhanced. However, increased portability alone may not contribute to retirement income security if portable benefits are cashed out and not preserved.

Available evidence suggests that little opportunity for portability gains lies in accelerated vesting. Greater potential is inherent in policies that would somehow protect separated vested defined benefit plan participants from losses due to inflation. However, such policies would impose costs that might discourage employers from sponsoring defined benefit plans, potentially leading to expanded use of defined contribution plans and wider availability of preretirement lump-sum distributions, to the possible detriment of retirement income.

There is evidence that lump sum distributions are becoming more widely available, both from defined benefit plans and from increasingly popular defined contribution plans. Therefore, the importance of preservation to retirement income security is growing. Although current law provides vehicles for preservation, lump-sum recipients usually do not exercise this option. Increased preservation can bolster retirement income. However, mandated preservation or large penalties on preretirement use of lump sums might discourage some workers from committing discretionary income to tax-qualified saving.

Table 1

Hypothetical Benefit Accumulation under a Defined Benefit Pension Plan for Worker Keeping One Job for 30 Years vs. Worker Holding Three 10 Year Jobs for 30 Years (constant dollars)

At Year	Pay in Constant Year 1 Dollars	Accrued Monthly Annuity Credited for Most Recent 10 Years of Service	Current Value of Credit for First 10 Years of Service	Current Value of Credit for Second 10 Years of Service	Total Monthly Annuity Payable at Retirement ^a
keeping one job for 30 years					
10	\$32,811	\$410	\$410	b	b
20	36,243	453	453	\$453	b
30	40,035	500	500	500	\$1,501
changing jobs every 10 years					
10	32,811	410	410	b	b
20	36,243	453	277	453	b
30	40,035	500	187	306	994

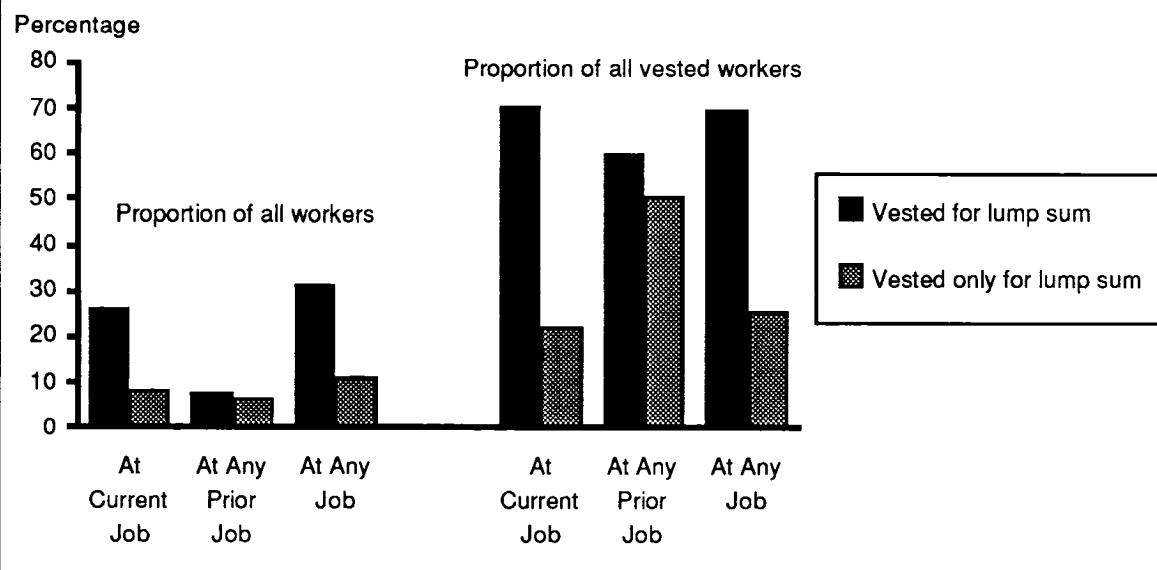
Source: Employee Benefit Research Institute.

^aReal value of first monthly benefit paid in retirement. Thereafter, benefit value will be eroded by inflation.

bNot applicable.

Note: Assumes starting pay of \$30,000 and real annual pay increases of 1 percent. The defined benefit plan formula is assumed to provide an annual pension equal to 1.5 percent of final pay times years of service. Annual inflation is assumed to be 4 percent. Assumes no benefit increases following separation from service.

Chart 1: Lump-Sum Vesting Among Full-Time Private Sector Workers, May 1988



Source: Employee Benefit Research Institute tabulations of the May 1988 Current Population Survey employee benefit supplement.

Table 2

Distribution of Preretirement Lump-Sum Recipients, Aggregate Amount^a of Most Recent LSDs Received, and Average Amount^a Received, by Amount of LSD, Year of Receipt, and Selected Characteristics of Recipients; Civilian Workers Aged 16 or over, May 1988 (dollar amounts reported in constant 1988 dollars)

Recipient Characteristics	Recipients		Aggregate Amount		Average Amount per Recipient ^d
	In Thousands ^b	Percentage of total ^c	\$ Billions ^b	Percentage of total ^c	
Total	8,478	100%	\$48.1	100%	\$6,800
Amount of Most Recent LSD					
\$1-\$499	1,042	15	0.3	1	300
\$500-\$999	955	13	0.7	1	700
\$1,000-\$2,499	1,627	23	2.7	6	1,200
\$2,500-\$4,999	1,220	17	4.4	9	3,600
\$5,000-\$9,999	1,114	16	7.9	16	7,100
\$10,000-\$14,999	449	6	5.4	11	12,000
\$15,000-\$19,999	211	3	3.6	7	16,900
\$20,000-\$49,999	335	5	9.7	20	29,100
\$50,000 or more	160	2	13.5	28	67,200
Year in Which Most Recent LSD Was Received					
1985-1988 ^e	3,391	41	19.7	41	6,500
1980-1984	2,403	29	13.8	29	6,600
1975-1979	1,191	14	7.5	16	7,700
1970-1974	579	7	3.4	7	7,200
1960-1969	558	7	2.7	6	6,600
Before 1960	136	2	0.5	1	5,400
Sex					
Male	4,597	54	32.9	68	8,600
Female	3,881	46	15.2	31	4,600
Race					
White	7,941	94	46.5	97	6,900
Black	426	5	1.1	2	3,600
Other	110	1	0.4	1	4,000
Age in May 1988					
16-24	161	2	0.1	0	800
25-34	2,348	28	6.0	12	2,900
35-44	3,149	37	14.7	31	5,500
45-54	1,666	20	12.2	25	9,200
55-59	545	6	7.7	16	18,900
60 or over	608	7	7.4	15	15,600
Age When Most Recent LSD Was Received					
16-24	1,225	15	2.3	5	2,100
25-34	3,755	45	13.3	28	4,100
35-44	2,042	25	15.2	32	8,500
45-54	850	10	10.1	21	14,500
55-59	214	3	4.7	10	26,800
60 or over	171	2	2.0	4	15,400

(continued)

Table 2 (continued)

Recipient Characteristics	Recipients		Aggregate Amount		Average Amount per Recipient ^d
	In Thousands ^b	Percentage of total ^c	\$ Billions ^b	Percentage of total ^c	
1988 Earnings					
\$1-\$4,999	345	5%	\$3.0	8%	\$10,500
\$5,000-\$9,999	616	9	1.8	5	3,300
\$10,000-\$14,999	954	13	3.0	8	3,600
\$15,000-\$19,999	1,113	15	4.7	13	5,100
\$20,000-\$24,999	1,045	14	4.6	13	5,000
\$25,000-\$29,999	818	11	4.6	13	6,400
\$30,000-\$49,999	1,761	24	8.8	25	6,200
\$50,000 or more	561	8	4.9	14	10,300

Source: Employee Benefit Research Institute tabulations of the May 1988 Current Population Survey employee benefit supplement (CPS EBS).

^aAggregate and average amounts may be understated. While 8.5 million workers are estimated to have received LSDs as of May 1988, data on the amount of the most recent LSD received are only available for 7.1 million of these individuals. Therefore, the aggregate amount of most recent LSDs received excludes the LSDs received by the remaining 1.4 million workers, leading to an understatement of aggregate amounts received. However, if no systematic relationship exists between the amount of LSD received and whether or not the amount is reported, distributions and averages will not be affected. (Without evidence of the nature of such a relationship, the effect on estimated averages is ambiguous.) In addition, in the May 1988 CPS EBS public use data base, all LSDs reported to be greater than \$99,999 in nominal dollars have been top-coded at \$99,999. An estimated 36,800 workers had received LSDs equal to or in excess of this amount as of May 1988. Therefore, both aggregate and average amounts may be understated to the degree that the amounts received by these workers actually exceeded this amount.

^bIndividual items may not add to total because some respondents did not report some characteristics of themselves or of their LSDs.

^cBases of percentages exclude respondents for whom recipient and LSD characteristics were not reported.

^dRounded to nearest \$100.

^eBecause the survey was conducted in May 1988, it includes only LSDs received in the first four to five months of 1988.

Table 3

Distribution of Aggregate Most Recent Lump-Sum Amounts Received, Potential Accumulations at Age 65, and Associated Average Amounts, by Selected Economic and Demographic Variables, Civilian Workers Aged 16 or Over, May 1988

Recipient Characteristics	Aggregate Amount ^a and % Distribution When:								
	Rec'd \$ Bill.	%	Age 65 1 ^b \$ Bill.	%	Age 65 2 ^c \$ Bill.	%	Average Amount ^a When: Rec'd	Age 65 1 ^b	Age 65 2 ^c
Total	\$48.1	100%	\$98.8	100%	\$140.9	100%	\$6,800	\$13,900	\$19,800
Amount of LSD									
\$1-\$499	0.3	1	0.7	1	1.2	1	300	700	1,100
\$500-\$999	0.7	1	1.7	2	2.8	2	700	1,800	2,900
\$1,000-\$2,499	2.7	6	6.8	7	10.7	8	1,200	4,200	6,600
\$2,500-\$4,999	4.4	9	10.6	11	16.4	12	3,600	8,700	13,500
\$5,000-\$9,999	7.9	16	17.7	18	26.3	19	7,100	15,900	23,600
\$10,000-\$14,999	5.4	11	11.6	12	16.7	12	12,000	25,800	37,300
\$15,000-\$19,999	3.6	7	7.2	7	10.2	7	16,900	34,200	48,400
\$20,000-\$49,999	9.7	20	20.2	20	29.0	21	29,100	60,200	86,400
\$50,000 or more	13.5	28	22.2	22	27.5	20	67,200	138,800	172,100
Sex									
Male	32.9	68	65.9	67	92.4	66	8,600	17,100	24,000
Female	15.2	31	32.9	33	48.4	34	4,600	10,100	14,800
Race									
White	46.5	97	95.4	97	135.9	96	6,900	14,200	20,300
Black	1.1	2	2.6	3	3.8	3	3,600	8,100	12,100
Other	0.4	1	0.8	1	1.2	1	4,000	8,100	11,500
Age in May 1988									
16-24	0.1	d	0.4	d	0.6	d	800	2,200	4,000
25-34	6.0	12	16.2	16	27.5	19	2,900	7,800	13,100
35-44	14.7	31	34.5	35	52.3	37	5,500	12,900	19,600
45-54	12.2	25	23.7	24	32.0	23	9,200	17,900	24,200
55-59	7.7	16	12.7	13	15.5	11	18,900	31,300	38,400
60 or over	7.4	15	11.3	11	12.8	9	15,600	24,000	27,200
Age When Most Recent LSD Was Received									
16-24	2.3	5	7.1	7	12.4	9	2,100	6,700	11,700
25-34	13.3	28	33.7	34	53.1	38	4,100	10,500	16,600
35-44	15.2	32	31.1	31	43.7	31	8,500	17,300	24,400
45-54	10.1	21	16.6	17	20.3	14	14,500	23,800	29,200
55-59	4.7	10	6.8	7	7.5	5	26,800	38,400	42,600
60 or over	2.0	4	2.3	2	2.4	2	15,400	22,500	24,200
Not reported	0.4	1	0.7	1	1.0	1	8,600	15,300	20,800
1988 earnings									
\$1-\$4,999	3.0	6	5.0	5	6.4	5	10,500	17,600	22,400
\$5,000-\$9,999	1.8	4	3.7	4	5.5	4	3,300	7,000	10,300
\$10,000-\$14,999	3.0	6	6.8	7	10.2	7	3,600	8,300	12,400
\$15,000-\$19,999	4.7	10	10.4	11	15.3	11	5,100	11,200	16,400
\$20,000-\$24,999	4.6	9	9.8	10	14.5	10	5,000	10,800	15,900
\$25,000-\$29,999	4.6	10	9.8	10	14.1	10	6,400	13,500	19,600
\$30,000-\$49,999	8.8	18	18.4	19	26.5	19	6,200	13,000	18,800
\$50,000 or more	4.9	10	10.1	10	14.5	10	10,300	21,200	30,400
Not reported	12.7	26	24.8	25	33.9	24	12,400	24,300	33,200

(continued)

Table 3 (continued)

Source: Employee Benefit Research Institute tabulations of the May 1988 Current Population Survey employee benefit supplement (CPS EBS).

^aAggregate and average amounts may be understated. While 8.5 million workers are estimated to have received LSDs as of May 1988, data on the amount of the most recent LSD received are available for only 7.1 million of these individuals. Therefore, the aggregate amount of most recent LSDs received excludes the LSDs received by the remaining 1.4 million workers, leading to an understatement of aggregate amounts received. However, if no systematic relationship exists between the amount of LSD received and whether or not the amount is reported, distributions and averages will not be affected. (Without evidence of the nature of such a relationship, the effect on estimated averages is ambiguous.) In addition, in the May 1988 CPS EBS public use data base, all LSDs reported to be greater than \$99,999 in nominal dollars have been top-coded at \$99,999. An estimated 36,800 workers had received LSDs equal to, or in excess of, this amount as of May 1988. Therefore, both aggregate and average amounts may be understated to the degree that the amounts received by these workers actually exceeded this amount. Averages are rounded to nearest \$100.

^bAssumes a less aggressive investment strategy under which historical long-term real returns have averaged 2.3 percent annually. See footnote 12.

^cAssumes a more aggressive investment strategy under which historical long-term real returns have averaged 3.7 percent annually. See footnote 12.

^dLess than 0.5 percent.

Table 4

Proportion of Preretirement Lump-Sum Recipients Reporting Various Uses for Any of their Most Recent LSD; by Selected Demographic and Economic Variables; Civilian Workers Aged 16 or Over, May 1988

Recipient Characteristics	Received LSD from Prior Job (thousands) ^a	IRA	Proportion of Recipients Using Any of Their LSD for:						
			Insurance annuity or retirement plan	Tax-qualified financial savings ^b	Financial savings ^c	Savings ^d	Consumption ^e	Discretionary consumption ^f	Nondiscretionary consumption ^g
Total	8,478	11%	2%	13%	35%	65%	40%	30%	11%
Sex									
Male	4,597	12	3	15	36	67	38	29	6
Female	3,881	10	2	11	34	62	41	30	5
Race									
White	7,941	11	2	14	36	65	40	30	10
Black	426	6	h	6	24	59	42	35	0
Other	110	17	h	17	26	76	24	18	0
Marital Status									
Married	6,043	12	2	14	36	66	38	30	6
Separated	242	10	1	11	20	62	33	26	0
Widowed/divorced	1,211	8	2	10	27	58	45	28	2
Never married	982	13	2	15	42	64	46	33	2
Amount of Most Recent LSD									
\$1-\$499	1,042	3	i	3	21	50	50	41	1
\$500-\$999	955	6	1	6	31	62	40	29	1
\$1,000-\$2,499	1,627	8	1	8	28	62	43	34	2
\$2,500-\$4,999	1,220	16	1	17	39	68	37	25	2
\$5,000-\$9,999	1,114	17	4	21	46	74	33	25	1
\$10,000-\$19,999	660	23	5	28	56	80	33	22	1
\$20,000 or more	495	22	10	29	62	81	30	22	1
Age When Most Recent LSD Was Received									
16-24	1,225	3	1	4	24	51	50	37	2
25-34	3,755	9	2	10	32	67	39	29	5
35-44	2,042	13	2	15	38	66	39	32	2
45-54	850	22	5	26	50	70	35	22	1
55 or over	385	31	7	36	61	75	29	25	0
Year in Which Most Recent LSD Was Received									
1988j	451	18	5	23	46	74	31	25	0
1987	1,220	18	3	20	46	72	37	31	1
1986	920	15	3	18	39	70	38	29	1
1985	800	15	2	17	45	72	30	21	1
1980-1984	2,403	13	3	15	36	66	38	28	3
1975-1979	1,191	6	1	7	22	57	46	36	2
1970-1974	579	1	1	2	25	61	40	28	1
Before 1970	914	1	2	3	25	49	50	29	1

(continued)

Table 4 (continued)

Recipient Characteristics	Received LSD from Prior Job (thousands) ^a	Proportion of Recipients Using Any of Their LSD for:							Discretionary consumption ^e	Nondiscretionary consumption ^e
		IRA	Insurance annuity or retirement plan	Tax-qualified financial savings ^b	Financial savings ^c	Savings ^d	Consumption ^e			
1988 Earnings										
\$1-\$9,999	961	6%	1%	7%	32%	63%	45%	35%	1%	
\$10,000-\$14,999	954	6	2	8	24	56	46	34	1	
\$15,000-\$19,999	1,113	11	1	12	31	68	37	27	1	
\$20,000-\$24,999	1,045	11	1	12	35	62	44	34	1	
\$25,000-\$29,999	818	10	2	11	35	66	39	22	2	
\$30,000-\$49,999	1,761	14	3	16	38	63	40	32	2	
\$50,000 or more	561	20	6	25	55	78	30	22	1	
1987 Family Income										
\$1-\$14,999	757	8	1	8	24	59	47	32	1	
\$15,000-\$19,999	1,198	6	1	7	28	62	43	32	2	
\$20,000-\$24,999	735	8	2	10	30	70	39	30	1	
\$25,000-\$29,999	975	8	1	9	28	63	41	31	1	
\$30,000-\$34,999	804	11	2	13	34	63	39	32	1	
\$35,000-\$49,999	2,241	12	3	15	39	66	37	28	3	
\$50,000-\$74,999	682	16	4	18	45	68	36	29	1	
\$75,000 or more	818	17	7	23	48	68	37	26	1	
May 1988 Pension Status^k										
Nonparticipants	2,672	10	1	11	33	64	40	8	1	
Participants	5,806	12	3	14	36	65	40	23	6	

Source: Employee Benefit Research Institute tabulations of the May 1988 Current Population Survey employee benefit supplement.

^aIndividual items may not add to total because some respondents did not report some information.

^b Includes IRAs, insurance annuities, and other retirement programs.

^cIncludes tax qualified savings, savings accounts, and other financial instruments.

^dIncludes all financial savings, purchase of a house, payment of a mortgage, and payment of loans or debts.

^eIncludes purchase of a car education expenses expenses incurred during a period of unemployment, and other uses.

^fIncludes purchase of a car, and other uses.

^gIncludes education expenses, and expenses incurred during a period of unemployment.

^hNo observations in category.

ⁱLess than 0.5 percent.

^jBecause the survey was conducted in May 1988, includes only LSDs received in the first four to five months of 1988.

^kA worker is considered to be a pension participant if he or she reported inclusion in a pension, retirement, profit-sharing, stock, or 401(k)-type plan at a wage and salary job, or reported a self-employed job and contributions to an IRA or Keogh.

Table 5

**Proportion of Preretirement Lump-Sum Recipients Reporting Various Uses for All of their Most Recent LSDs, by Selected Demographic and Economic Variables,
Civilian Workers Aged 16 or Over, May 1988^a**

Recipient Characteristics	Received LSD from Prior Job (thousands) ^b	Proportion of Recipients Using All of Their Lump-Sum Distribution for:						
		Tax-qualified financial savings ^c	Financial savings ^d	Savings ^e	Discretionary consumption ^f	Nondiscretionary consumption ^g	Consumption ^h	Mixed consumption and savings
Total	8,478	11%	30%	59%	25%	8%	34%	5%
Sex								
Male	4,597	12	30	61	24	8	32	6
Female	3,881	10	30	57	26	10	36	5
Race								
White	7,941	11	31	59	25	9	34	5
Black	426	4	21	52	28	6	36	7
Other	110	9	24	76	18	5	24	i
Marital Status								
Married	6,043	11	31	61	26	7	33	5
Separated	242	11	14	59	22	7	31	2
Widowed or divorced	1,211	8	23	53	25	15	40	4
Never married	982	13	37	54	23	12	35	11
Amount of Most Recent LSD								
\$1-\$499	1,042	3	21	50	41	9	49	1
\$500-\$999	955	6	28	59	26	11	37	3
\$1,000-\$2,499	1,627	7	24	56	29	9	38	5
\$2,500-\$4,999	1,220	14	33	62	20	10	31	5
\$5,000-\$9,999	1,114	18	36	67	19	6	25	7
\$10,000-\$19,999	660	23	42	67	11	7	20	13
\$20,000 or more	495	22	44	70	9	4	19	12
Age When Most Recent LSD Was Received								
16-24	1,225	4	23	49	34	13	47	2
25-34	3,755	9	28	61	24	9	33	6
35-44	2,042	13	30	60	27	6	33	6
45-54	850	20	41	62	18	9	27	8
55 or over	385	28	53	70	19	3	23	6
Year in Which Most Recent LSD Was Received								
1988 ^j	451	21	43	69	21	5	26	5
1987	1,220	16	39	61	22	5	27	11
1986	920	15	32	61	22	8	30	9
1985	800	15	39	69	19	8	27	3
1980-1984	2,403	13	30	60	25	8	33	5
1975-1979	1,191	5	19	53	31	10	42	4
1970-1974	579	1	21	59	26	12	38	2
Before 1970	694	1	21	44	36	15	52	3

(continued)

Table 5 (continued)

Recipient Characteristics	Received LSD from Prior Job (thousands) ^b	Proportion of Recipients Using All of Their LSD for:						
		Tax-qualified financial savings ^c	Financial savings ^d	Savings ^e	Discretionary consumption ^f	Nondiscretionary consumption ^g	Consumption ^h	Mixed consumption and savings
1988 Earnings								
\$1-\$9,999	961	6%	28%	54%	26%	9%	36%	9%
\$10,000-\$14,999	954	5	19	52	31	11	42	4
\$15,000-\$19,999	1,113	11	26	62	22	9	32	5
\$20,000-\$24,999	1,045	10	31	56	28	9	38	6
\$25,000-\$29,999	818	9	30	60	19	15	34	5
\$30,000-\$49,999	1,761	14	34	59	30	5	36	4
\$50,000 or more	561	22	45	69	16	5	21	9
1987 Family Income								
\$1-\$14,999	757	6	19	49	23	14	37	10
\$15,000-\$19,999	1,198	6	23	56	26	10	37	6
\$20,000-\$24,999	735	8	26	61	24	6	30	9
\$25,000-\$29,999	975	8	25	59	27	9	37	4
\$30,000-\$34,999	804	11	28	60	29	6	35	4
\$35,000-\$49,999	2,241	13	33	62	25	8	32	4
\$50,000-\$74,999	682	17	39	63	26	5	31	5
\$75,000 or more	818	18	44	63	22	9	32	4
May 1988 Pension Status^k								
Nonparticipants	3,978	10	28	58	38	12	51	6
Participants	4,500	12	32	60	19	7	27	5

Source: Employee Benefit Research Institute tabulations of the May 1988 Current Population Survey employee benefit supplement.

^aFor purposes of determining exclusive uses of LSDs, "don't know" and missing responses were taken as "no" responses. For example, a worker whose only "yes" response was to the IRA option was classified here as using his or her entire LSD for "tax qualified savings" even if the worker's response to one or more non tax-qualified options was "don't know" or missing. Some workers did not respond "yes" to any of the use options; therefore, mutually-exclusive horizontal percentages may add to less than 100 percent.

^bIndividual items may not add to total because some respondents did not report some characteristics.

^cIncludes IRAs, insurance annuities, and other retirement programs.

^dIncludes tax qualified savings, savings accounts, and other financial instruments.

^eIncludes all financial savings, purchase of a house, payment of a mortgage, and payment of loans or debts.

^fIncludes purchase of a car and other uses.

^gIncludes education expenses and expenses incurred during a period of unemployment.

^hIncludes discretionary and nondiscretionary consumption.

ⁱLess than 0.5 percent.

^jBecause the survey was conducted in May 1988, includes only LSDs received in the first four to five months of 1988.

^kA worker is considered to be a pension participant if he or she reported inclusion in a pension, retirement, profit-sharing, stock, or 401(k)-type plan at a wage and salary job or reported a self-employed job and contributions to an IRA or Keogh.

Table 6

Proportion of Aggregate Amount^a of Most Recent Preretirement LSDs Used Entirely for Selected Purposes,^b by Selected Demographic and Economic Variables, Civilian Workers Aged 16 or Over, May 1988 (dollar amounts reported in constant 1988 dollars)

Recipient Characteristics	Received LSD from Prior Job (billions) ^c	Proportion of Aggregate Lump-Sum Amounts Reportedly Used Entirely for:						
		Tax-qualified financial savings ^d	Financial savings ^e	Savings ^f	Discretionary consumption ^g	Nondiscretionary consumption ^h	Consumption ⁱ	Mixed consumption and savings
Total	\$48.1	22%	44%	70%	15%	5%	21%	9%
Sex								
Male	32.9	19	44	71	14	4	19	11
Female	15.1	29	46	68	18	6	26	6
Race								
White	46.5	22	45	70	15	5	21	9
Black	1.1	4	18	49	20	10	31	15
Other	0.4	34	57	69	23	7	30	j
Marital Status								
Married	38.1	22	47	73	15	4	19	8
Separated	1.1	8	9	72	12	9	22	j
Widowed or divorced	5.6	22	32	54	23	11	34	11
Never married	3.3	28	51	60	11	4	18	22
Amount of Most Recent LSD								
\$1-\$499	0.3	3	19	48	42	9	50	1
\$500-\$999	0.7	7	28	57	27	12	39	3
\$1,000-\$2,499	2.7	7	23	57	29	9	38	5
\$2,500-\$4,999	4.4	15	34	63	21	10	31	5
\$5,000-\$9,999	7.9	17	35	68	17	6	24	8
\$10,000-\$19,999	8.9	25	43	68	11	7	19	13
\$20,000 or more	23.2	26	53	75	13	2	16	9
Age When Most Recent LSD Was Received								
16-24	2.3	6	17	38	38	18	57	3
25-34	13.3	13	28	65	16	9	26	9
35-44	15.2	20	41	67	21	3	24	9
45-54	10.1	25	55	78	4	3	7	15
55 or over	6.8	41	75	82	13	1	14	3
Year in Which Most Recent LSD Was Received								
1988 ^k	2.5	36	59	71	25	1	26	3
1987	6.3	23	49	65	14	4	18	16
1986	5.8	26	36	58	19	4	23	19
1985	5.1	14	61	78	7	9	15	7
1980-1984	13.8	23	45	74	13	3	18	8
1975-1979	7.5	26	39	75	16	5	21	4
1970-1974	3.4	14	47	78	11	6	17	5
Before 1970	3.2	j	14	44	33	14	49	5

(continued)

Table 6 (continued)

Recipient Characteristics	Received LSD from Prior Job (billions) ^c	Proportion of Aggregate Lump-Sum Amounts Reportedly Used Entirely for:						
		Tax-qualified financial savings ^d	Financial savings ^e	Savings ^f	Discretionary consumption ^g	Nondiscretionary consumption ^h	Consumption ⁱ	Mixed consumption and savings
Workers 1988 Earnings								
\$1-\$9,999	\$4.8	25%	58%	74%	12%	4%	17%	9%
\$10,000-\$14,999	3.0	10	25	56	17	15	32	11
\$15,000-\$19,999	4.7	24	41	77	11	5	18	5
\$20,000-\$24,999	4.6	21	34	63	20	6	28	9
\$25,000-\$29,999	4.6	11	28	56	22	11	33	11
\$30,000-\$49,999	8.8	27	54	72	18	4	22	5
\$50,000 or more	4.9	21	42	65	12	1	13	21
Not reported	12.7	24	49	76	13	3	16	7
Workers 1987 Family Income								
\$1-\$14,999	4.4	14	28	58	15	12	27	16
\$15,000-\$19,999	4.7	4	26	58	20	6	30	12
\$20,000-\$24,999	3.1	14	36	73	14	2	16	11
\$25,000-\$29,999	3.5	17	32	64	20	7	37	7
\$30,000-\$34,999	4.6	23	44	66	24	4	28	4
\$35,000-\$49,999	11.1	20	44	74	14	5	19	7
\$50,000-\$74,999	6.0	34	64	77	6	4	10	12
\$75,000 or more	9.8	31	56	75	15	3	18	7
May 1988 Pension Status^j								
Nonparticipants	21.5	21	41	70	14	7	20	9
Participants	26.6	22	47	69	17	4	22	9

Source: Employee Benefit Research Institute tabulations of the May 1988 Current Population Survey employee benefit supplement.

^aAggregate amounts are understated by an unknown amount. While 8.5 million workers are estimated to have received LSDs as of May 1988, data on the amount of the most recent LSD received are available for only 7.1 million of these individuals. Therefore, the aggregate amount of most recent LSDs received excludes the LSDs received by the remaining 1.4 million workers. In addition, in the May 1988 CPS EBS public use data base, all LSDs reported to be greater than \$99,999 in nominal dollars have been top-coded at \$99,999. An estimated 36,800 workers had received LSDs equal to or in excess of this amount as of May 1988. Therefore, aggregate amounts are understated to the degree that the amounts received by these workers actually exceeded this amount.

^bFor purposes of determining exclusive uses of LSDs, "don't know" and missing responses were taken as "no" responses. For example, a worker whose only "yes" response was to the IRA option was classified here as using his or her entire LSD for "tax qualified savings" even if the worker's response to one or more non tax-qualified options was "don't know" or missing. Some workers did not respond "yes" to any of the use options; therefore, mutually-exclusive horizontal percentages may add to less than 100 percent.

^cIndividual items may not add to total because some respondents did not report some characteristics.

^dIncludes IRAs, insurance annuities, and other retirement programs.

^eIncludes tax qualified savings, savings accounts, and other financial instruments.

^fIncludes all financial savings, purchase of a house, payment of a mortgage, and payment of loans or debts.

^gIncludes purchase of a car and other uses.

^hIncludes education expenses and expenses incurred during a period of unemployment.

ⁱIncludes discretionary and nondiscretionary consumption.

^jLess than 0.5 percent.

^kBecause the survey was conducted in May 1988, includes only LSDs received in the first four to five months of 1988.

^lA worker is considered to be a pension participant if he or she reported inclusion in a pension, retirement, profit-sharing, stock, or 401(k)-type plan at a wage and salary job, or reported a self-employed job and contributions to an IRA or Keogh.

References

- Allen, Steven; Robert Clark; and Ann McDermed. "The Pension Cost of Changing Jobs." *NBER Working Paper* no. 2935. Cambridge, MA: National Bureau of Economic Research, 1989.
- Andrews, Emily S. *The Changing Profile of Pensions in America*. Washington, DC: Employee Benefit Research Institute, 1985.
- _____. "Pension Portability and What It Can Do for Retirement Income: A Simulation Approach." *EBRI Issue Brief* no. 65 (Employee Benefit Research Institute, April 1987).
- Atkins, G. Lawrence. *Spend It or Save It? Pension Lump-Sum Distributions and Tax Reform*. Washington, DC: Employee Benefit Research Institute, 1986.
- Clark, Robert L., and Ann A. McDermed. "Earnings and Pension Compensation: The Effect of Eligibility." *Quarterly Journal of Economics* (May 1986): 341-361.
- _____. "Portability and Pension Wealth." Unpublished manuscript, 1987.
- Davis, Jennifer. "Pensions, Social Security, and Savings." *EBRI Issue Brief* no. 97 (Employee Benefit Research Institute, December, 1989).
- Employee Benefit Research Institute. *Fundamentals of Employee Benefit Programs*, fourth ed. Washington, DC: Employee Benefit Research Institute, forthcoming.
- Gustman, Alan and Thomas L. Steinmeier. "Pensions, Efficiency Wages, and Job Mobility." Paper prepared for U.S. Department of Labor, Office of the Assistant Secretary for Policy. Washington, DC, 1987.
- Hay/Huggins Company, Inc.-Mathematica Policy Research. "The Effect of Job Mobility on Pension Benefits. Paper prepared for U.S. Department of Labor, Pension and Welfare Benefits Administration. Washington, DC, 1988.
- Hewitt Associates. *Lump-Sum Options and Postretirement Increases in Pension Plans*, 1989. Lincolnshire, IL: Hewitt Associates, 1989.
- Ibbotson Associates. *Stocks, Bonds, Bills, and Inflation: 1988 Yearbook*. Chicago: Ibbotson Associates, 1989.
- Turner, John A., and Daniel J. Beller, eds. *Trends in Pensions*. Washington, DC: U.S. Department of Labor, 1989.
- U.S. Department of Labor. Bureau of Labor Statistics. *Employee Benefits in Medium and Large Firms 1988*. Washington, DC: U.S. Government Printing Office, 1989.
- _____. *Employee Benefits in State and Local Governments, 1987*. Washington, DC: U.S. Government Printing Office, 1989.