# SHOULD A LUMP-SUM PAYMENT REPLACE SOCIAL SECURITY'S DELAYED RETIREMENT CREDIT?

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## Executive Summary

Transforming Social Security's delayed retirement credit into a lump-sum payment rather than an increased monthly payment would likely encourage more workers to defer retirement and benefit claiming. The idea is thus worthy of further exploration. Several important design issues, however, must be addressed before policymakers give serious consideration to the reform. The most problematic aspect of the proposal is that implementing a lump-sum payment system for individuals older than the normal retirement age may create political pressure to extend this approach to those who are younger than the normal retirement age. Such an extension would risk a significant increase in elderly poverty rates relative to the current Social Security system.

## Introduction

Under the Social Security system, beneficiaries receive an increased payment per month for each month they delay claiming benefits. For beneficiaries at or over the normal retirement age, the increased payments for delayed claiming are made through the delayed retirement credit (DRC).[1] In 1983, as part of a broader Social Security reform, the DRC was raised over time, starting in 1987 and ending in 2005.

The increased payments made through the DRC are added to the base Social Security benefit, which is known as the Primary Insurance Amount (PIA). For workers born in 1943 or later, the DRC is equal to 8 percent of the worker's PIA for each year of delayed claiming beyond the

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[1] The normal retirement age is 65 years and four months for those turning 62 in 2001. For workers claiming benefits before the normal retirement age, the increased payments for delayed claiming beyond the early eligibility age of 62 are made through adjustments to the early reduction factor.

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normal retirement age and up to age 70. For example, a worker born in 1943 with a PIA of $1,000 would have the choice of receiving $1,000 per month if she claimed benefits at age 66 (which is the normal retirement age under current law for a worker born in 1943) or $1,080 per month if she waited until age 67 to claim benefits. If she waited until age 70 to claim benefits, she would receive $1,320 per month (since she would receive four years of DRCs, or 32 percent of her PIA in total, in exchange for delaying her benefit receipt).

A recent proposal would alter this system.[2] Under the proposal, beneficiaries who delay their initial benefit receipt past the normal retirement age would receive a lump-sum payment rather than an increased payment per month. In other words, instead of receiving an extra $80 per month in exchange for waiting until age 67 to claim benefits, the worker in the example above would receive the present value[3] of the $80 per month as a lump-sum payment immediately upon claiming benefits at age 67. The proposal, in effect, represents reverse annuitization relative to the current system — in exchange for forgoing a specific payment per month (an annuity), the individual would receive a lump-sum payment.

# Motivation for Reform

The motivation for introducing a lump-sum alternative to the DRC reflects two issues: the degree of early benefit claiming under the current system, and the apparent preference for lump-sum payments rather than annuity payments.

First, the vast majority of workers claim benefits early. In 1999, for example, 77.4 percent of new beneficiaries claimed benefits before age 65 (Committee on Ways and Means, U.S. House of Representatives, 2000).[4] The broader concern with this high rate of early claiming is that it is associated with early retirement and potentially reduced income at very old ages.[5]

Second, workers appear to value a lump-sum payment more highly than an annuity payment with an equivalent expected present value at the Social Security system's assumed real (i.e., inflation-adjusted) discount rate of approximately 3 percent per year.[6] The preference for a lump-sum payment may reflect a higher discount rate than the one used in Social Security calculations, or it may reflect more complicated departures from the traditional discounting model. Table 1 presents the expected present value of an 8 percent DRC, starting at different ages, for beneficiaries of various cohorts and applying different discount rates.

For example, for the typical male born in 1960 and with a discount rate of 3 percent, the expected present value of an 8 percent annual DRC at age 67 for every $1 of PIA is 96.2 cents. A risk-neutral male worker should thus be roughly indifferent between (a) claiming $1 at age 67 and (b) delaying claiming until age 68 and then receiving $1.08 per year for the rest of his life.[7] The expected loss to the worker from delaying claiming by one year is approximately 4 percent of his PIA.

The table shows that the expected present value of the DRC is higher for women than for men, since female life expectancies are longer than male life expectancies. Averaged across males and females, however, the 8 percent DRC is roughly actuarially fair for workers at around age 65 (although it is somewhat less than actuarially fair at age 69).[8]

Table 1 also shows the effects of higher discount rates. At higher discount rates, the expected loss from delaying claiming can be substantial. For example, for the typical male with a 6 percent discount rate, the expected loss is about 25 cents per dollar of PIA. At a 12 percent discount rate, the expected loss is about 50 cents per dollar of PIA. For females, the expected losses are somewhat lower, but still substantial.

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[2] The proposal was discussed in the context of the earnings test (Aaron, 1999).

[3] A present value is the lump-sum value, at the present time, of a future stream of payments.

[4] It is worth noting that the average age of initial benefit claiming appears to have stabilized after declining substantially through the late 1970s.

[5] For an overview of the substantial literature on the impact of Social Security on retirement behavior, see Hurd (1990). See also Diamond and Gruber (1999).

[6] A discount rate, used in calculating present values, is an assumed interest rate that reflects the time value of money (i.e., a dollar today is worth more than a dollar in the future). The intermediate cost estimates of the Social Security Trustees assume a long-run real interest rate of 3 percent. See *2000 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds* (2000).

[7] Note that for a worker born in 1960, the normal retirement age is 67.

[8] This analysis does not incorporate the effect of the widow benefit increase from the DRC. For further discussion, see Coile, Diamond, Gruber, and Jousten (1999).

Table 1: Expected Present Value of 8 Percent DRC as Percent of PIA at Different Discount Rates

| Discount Rate | 3% | 6% | 9% | 12% |
|---|---|---|---|---|
| Males born in 1960 | | | | |
| Age 65 | 0.984 | 0.760 | 0.611 | 0.506 |
| Age 67 | 0.962 | 0.769 | 0.636 | 0.540 |
| Age 69 | 0.859 | 0.681 | 0.558 | 0.470 |
| Females born in 1960 | | | | |
| Age 65 | 1.155 | 0.861 | 0.674 | 0.548 |
| Age 67 | 1.136 | 0.877 | 0.707 | 0.589 |
| Age 69 | 1.032 | 0.790 | 0.630 | 0.520 |

Source: Author's calculations.
Note: Assumes population mortality rates as reflected in Social Security Administration's sex- and cohort-specific survival tables from the 1995 Old-Age, Survivors, and Disability Insurance (OASDI) Trustees' Report.

Table 2 shows the DRC that would be required with different discount rates to produce the same expected present value as an 8 percent DRC with a 3 percent discount rate. For example, for a 67-year old male, a 10 percent DRC with a 6 percent discount rate would produce the same expected value (for one year of delayed claiming) as an 8 percent DRC with a 3 percent discount rate. In other words, a male worker with a 6 percent discount rate would require a 10 percent DRC to perceive the same value from one year of delayed claiming as if his discount rate were 3 percent and the DRC were 8 percent.

Table 2: DRC Required for Perceived Present Value to Equal 8 Percent DRC at 3 Percent Discount Rate

| Discount Rate | 3% | 6% | 9% | 12% |
|---|---|---|---|---|
| Males born in 1960 | | | | |
| Age 65 | 8.0 | 10.4 | 12.9 | 15.6 |
| Age 67 | 8.0 | 10.0 | 12.1 | 14.2 |
| Age 69 | 8.0 | 10.0 | 12.3 | 14.6 |
| Females born in 1960 | | | | |
| Age 65 | 8.0 | 10.7 | 13.7 | 16.9 |
| Age 67 | 8.0 | 10.4 | 12.9 | 15.4 |
| Age 69 | 8.0 | 10.5 | 13.1 | 15.9 |

Source: Author's calculations.
Note: Assumes population mortality rates as reflected in Social Security Administration's sex- and cohort-specific survival tables from the 1995 OASDI Trustees' Report.

# Evidence on Discount Rates

Samwick (1997) estimates discount rates by age, and finds that the discount rate for those age 65 is slightly above 5 percent. That discount rate would suggest that even if the DRC is roughly actuarially fair from the perspective of the Social Security system, the typical male worker who delayed benefit receipt for one year should expect a lifetime loss from doing so of almost 25 percent of his PIA. This loss of income suggests that unless the worker highly values the insurance provided by the annuity, delayed claiming would not be worthwhile.

Survey evidence collected by economists who believe that individuals do not make perfectly rational decisions suggests even more strongly that lump-sum payments (equal to the expected present value of future annuity payments using the Social Security discount rate) are preferred to annuity payments. For example, Thaler (1994) finds that the median respondent was willing to give up $3,000 immediately in exchange for a payment in 10 years only if the delayed payment was at least $10,000, implying a discount rate (continuously compounded) of 12 percent. He also finds that the survey evidence is inconsistent with standard theory; discount rates appear to vary depending on the size of the prize, how the proposition is phrased, and the time horizon. Such departures from standard discounting, to the extent that they are prevalent in the population, pose deep challenges in modeling responses to the proposed DRC reform.

Fetherstonhaugh and Ross (1999) examine the reform under consideration, to exchange a lump-sum payment for the current increase in annuity payments under the DRC. They ask the following question:

> "Listed below are the two options that might become available to American workers who are deciding to retire at age 68 or age 65. The first option involves an increase in *yearly payment* and the second one involves a *one-time bonus*.
>
> 1. Under the current system, he could retire three years *later* at age 68, and then begin receiving a Social Security pension of $12,500 a year, which is equal to $10,000 *plus* a credit of $2,500.

2. Under the bonus plan, he could retire three years *later* at age 68, and then begin receiving a Social Security pension of $10,000 per year, but he would also receive a one-time bonus of $25,000 when he retires.

In which of the two systems described above would *you* be more willing to retire late?"

More than 75 percent of the respondents to the survey preferred the one-time bonus to the increased annuity. [9] In a subsequent question, respondents were asked about incentives for the average American worker. Roughly 80 percent indicated that a one-time bonus would provide a greater incentive for workers to delay retirement.

Steuerle and Bakija (1994) also note that the *perceived* benefits of the DRC may be smaller than the actual benefits. They argue that many people simply do not understand the DRC. A lump-sum payment may be easier to understand than an increased annuity. Steuerle and Bakija further argue that "people approaching old age often underestimate their remaining life expectancies, perhaps because they compare themselves to parents with shorter life expectancies or because they are unaware that their life expectancy at retirement is to an age considerably beyond the life expectancy at birth. As a result, even if they understood the DRC, they would not give it adequate weight" (Steuerle and Bakija, 1994). A lump-sum payment could address this concern, at least for those at the normal retirement age.

Given the apparent popular preference for lump-sum payments rather than annuity payments, transforming the DRC into a lump-sum payment could provide stronger incentives to delay benefit claiming past the normal retirement age than the current system. However, that incentive could be reversed one or more years beyond the normal retirement age. For example, assume the normal retirement age has increased to age 67, as is scheduled under current law. When the worker evaluates whether to delay claiming from age 67 to age 68, the lump-sum alternative makes delaying more attractive than the current system. At age 68, however, the worker would then be forgoing a lump-sum payment in order to earn a larger lump-sum payment at age 69.[10] Since the lump-sum payment increase would reflect the Social Security system's discount rate (see below), not the worker's discount rate, this tradeoff may be unappealing. The result could therefore be a mass of benefit claiming one year after the normal retirement age (or whenever a non-zero lump-sum payment were first available).

Despite the potential reversal of incentives one year after the normal retirement age, the overall impact of the reform may still be positive given the following factors: 1) the normal retirement age is scheduled to increase to age 67 by 2022; 2) few beneficiaries defer claiming beyond one year after the normal retirement age under the current system;[11] and 3) earlier claiming among those who currently claim well beyond the normal retirement age would have little adverse impact on elderly poverty (see below).

The lump-sum payment thus may induce an overall increase in delayed benefit claiming. Several design issues are crucially important, however.

# Defining the Lump-Sum Benefit

The details of the proposed reform involve several difficult design issues. This section briefly discusses some of these issues.

## Voluntary vs. Mandatory

One important issue is whether the lump-sum alternative to the current system would be an option available to beneficiaries in addition to the existing scheme, or would simply replace the existing scheme. If the system is voluntary, selection effects across the two alternatives could raise costs to the Social Security system (i.e., those with shorter life expectancies could disproportionately choose the lump-sum payment, while those with longer life expectancies could disproportionately choose the annuity option). In addition, a voluntary system may introduce more complexity into Social Security, since beneficiaries would have to understand and evaluate the two choices. On the other hand, simply replacing the existing DRC system with the lump-sum

[9] For the typical male born in 1960, the expected present value of the $2,500 additional annuity payment at a 3 percent discount rate is roughly $30,000, which is larger than the lump-sum payment. For the typical woman, the expected present value of the increased annuity is even larger, at roughly $35,000. The large majorities favoring the lump-sum payment are thus strong evidence that real discount rates are higher than 3 percent or that some other departure from the classical discounting model is present.

[10] The author thanks Peter Diamond for this insight.

[11] Those who do delay claiming to age 69 or 70, furthermore, are likely to have some combination of low discount rates and low expected mortality rates. To the extent that the delays are caused by low discount rates, the reform may not induce any earlier claiming than the existing system.

alternative could deny some beneficiaries access to as much (inflation-indexed and roughly actuarially fair) annuitization as they desire, and could diminish incentives (relative to the current system) for those with longer life expectancies to delay claiming benefits. For the purposes of the rest of this *brief*, it is assumed that the proposed system would replace the existing system, since that appears to be the intent of the proposal. Nonetheless, eliminating the current opportunity to increase inflation-indexed annuities may not represent sound policy.

## Design of Lump-Sum Payment

The proposal involves awarding the expected present value of the current DRC payments as a lump sum upon initial benefit claiming. An alternative, which may be easier for beneficiaries to understand, would involve paying them their forgone benefits (with interest) upon initial benefit claiming. In other words, consider a beneficiary delaying claiming from age 67 to age 68. Under the current system, the beneficiary would receive increased payments per month equal to 8 percent of her PIA in exchange for the delayed claiming. Under the proposal, she would instead receive a lump-sum payment equal to the expected discounted value of those additional payments. An alternative to the proposal would simply award her the benefits she would have received for the year, plus interest, upon claiming at age 68. If her benefit at age 67 (her normal retirement age) would have been $15,000, for example, and she delayed claiming until age 68, she would receive a lump-sum payment of $15,000 plus interest at age 68. The interest rate under the "deferred interest" approach could be chosen to make the two proposed alternatives equivalent for the typical worker, and the "deferred interest" approach may be easier to understand. For now, this *brief* assumes that the lump-sum payment would reflect the expected discounted value of the current DRCs.

## Computation of Present Value

If the lump-sum payments are computed as the expected present value of the current DRCs, two key parameters are the assumed mortality rates and discount rates. For example, the computations could be undertaken using the projected mortality rates among those actually deferring benefit claiming, or among the entire beneficiary population. The former would minimize the impact of changes in claiming behavior on actuarial balance for the Social Security system. The latter, however, is consistent with all other aspects of the current Social Security system, and is more likely to be politically acceptable than the alternative. Similarly, all other aspects of the Social Security system are evaluated using the assumed Trust Fund interest rate adopted by the Trustees of the system. Therefore, for the purposes of this *brief*, the lump-sum payments are computed using population mortality rates and the Social Security system's discount rate.

## Tax Treatment

Up to 85 percent of Social Security benefits may be taxable under the federal income tax if adjusted income exceeds certain thresholds specified by law. These provisions currently affect only about one-third of beneficiaries over the age of 65 (Committee on Ways and Means, U.S. House of Representatives, 2000). The lump-sum payment may raise income above the threshold in the year of initial claiming, causing some portion of the lump sum to be included in taxable income. This outcome means that at least some workers who delay claiming would experience a larger tax liability under a lump-sum system than under the current system. The income tax rules could be amended to exempt the lump-sum payments, but that could cause additional complexity and perhaps some confusion. Alternatively, the income tax rules could be amended to produce a similar lifetime tax outcome under the lump-sum approach as under current law (which could involve a long-term averaging approach). This *brief* implicitly assumes no change in tax liability as a result of the reform, but highlights that this issue is an important one to address before serious consideration is given to implementing the proposal.

## Spousal Benefits

As a result of an anomaly in the current Social Security system, spousal benefits are not increased by the DRC. (As discussed below, however, widow benefits *are* increased by the DRC.) Transforming the system into a lump-sum payment may make this oversight more transparent, since a worker with a spouse would receive the same lump-sum payment as a single worker. Ultimately, the proposed reform may therefore result in spousal benefits for delayed claiming past the normal retirement age. For the purposes of this *brief*, however, it is assumed that spousal benefits would be excluded from the lump-sum payment, just as they are excluded from the DRC.

### Widow Benefits

Under the current system, widows receive benefits from the DRC; their monthly benefit is increased if the primary worker had delayed claiming benefits past the normal retirement age. Under the proposed lump-sum approach, at least three options are possible: no increased widow benefit for spouses of workers who had received the lump-sum payment, an increase in the lump-sum death benefit (currently $255) for such widowed spouses, or an increase in their monthly benefit as under the current system. If the widow benefit were not adjusted to reflect delayed claiming, as under the current system, some widows could be worse off under the reform than under the current DRC. This *brief* therefore assumes that one of the two latter approaches will be adopted — widows of workers who had delayed benefit claiming will receive a higher benefit as a result, either in the form of an increased lump-sum death benefit or an increased annuity per month. To ensure that the system is actuarially equivalent to the current system, the lump sum paid to the worker should therefore reflect only a single, not a joint-and-survivor, mortality table.

### Application to Early Retirees

Finally, the proposal as written involves only the DRC, which applies to delayed claiming past the normal retirement age. Under current law, the normal retirement age is scheduled to increase to age 67 for those born in 1960 or later. If the proposal were adopted, it would therefore ultimately apply only between ages 67 and 70. It would seem likely that political pressure would build to apply the lump-sum approach (rather than increased annuity payments) to people younger than the normal retirement age as well. If that occurs, and in the absence of rules that limit the annual amount of the lump sum that one could access, the lump-sum approach could significantly affect poverty rates among widows and other very old beneficiaries. This concern represents perhaps the most problematic aspect of the proposal.

## Brief Analysis of Labor Supply Effects of Proposed Reform

Fully analyzing the proposed reform to the DRC is beyond the scope of this *brief*. Nonetheless, the "peak value" model developed by Coile and Gruber (2000) was used to provide some preliminary insight into the effects of the proposed reform. The model was developed to examine the effect of Social Security on retirement behavior and relies on data from the Health and Retirement Survey (a survey of individuals aged 51 to 61 in 1992). The model is described in more detail in Coile and Gruber (2000). For simplicity, the analysis focuses on male workers.

The model focuses on the multi-year incentives associated with additional work. It calculates the difference between expected lifetime Social Security benefits today (using a 3 percent real discount rate and population mortality rates) and the maximum expected lifetime Social Security benefits across all claiming dates (the so-called peak value) to measure the incentive for continued work.[12]

Retirement decisions are then examined by regressing retirement status for each worker in each year on Social Security wealth for that worker in that year, the peak value of Social Security wealth for that worker in that year, and a series of control variables (including age, earnings, Average Indexed Monthly Earnings — used in determining Social Security benefits — and other demographics).

To examine the effect of a lump-sum payment instead of the current DRC, we treat the lump sum as an effective increase in the DRC. For example, if an individual has a real discount rate of 9 percent (and assuming a classical discounting framework), the value to the individual of the lump-sum payment (computed using the Social Security discount rate of 3 percent) is effectively equivalent to a DRC of 12 percent. If the individual's discount rate is 12 percent, as suggested above in the Thaler evidence, the lump-sum payment is equivalent to a DRC of roughly 15 percent (see Table 2).

[12] It is worth noting that, especially with the elimination of the earnings test above the normal retirement age, claiming decisions are distinct from labor supply decisions. This *brief* ignores this distinction; workers are assumed to claim benefits when they retire (if they are at least age 62) and to retire when they claim benefits.

Table 3 presents the predicted retirement probabilities by age, averaged over individuals, under different scenarios. As the table shows, the lump-sum payments under the assumptions described above would be expected to substantially reduce the chance that workers would retire before age 69. For example, the conditional retirement rate for 65-year-olds (that is, the probability of retiring at age 65 given that the worker has not yet retired) is roughly 20 percent under the current system. Under the proposed reform, the retirement rate falls to between 10 and 16 percent depending on the scenario. At age 67, the conditional retirement rate falls from more than 8 percent to between 6 and 7.5 percent.

The proposed reform also reduces conditional retirement rates at age 62, from about 15 percent to between 8 and 13 percent, since it provides increased incentives for individuals to wait until beyond the normal retirement age before claiming benefits and retiring. The significant effects on labor force decisions before age 65 from an effective increase in the incentive to delay claiming beyond age 65 is consistent with the findings of Coile and Gruber (2000), which is not surprising since the same model is used here.

Table 3: Predicted Conditional Retirement Probabilities by Age Under Different Scenarios

| Age | Actual DRC for workers in sample[a] | DRC of 8% | Lump-sum equivalent to DRC of 12%[b] | Lump-sum equivalent to DRC of 15%[c] | Lump-sum equivalent to DRC of 20%[d] |
|---|---|---|---|---|---|
| 60 | .050 | .045 | .036 | .030 | .022 |
| 61 | .061 | .054 | .043 | .036 | .026 |
| 62 | .168 | .153 | .126 | .107 | .081 |
| 63 | .154 | .138 | .111 | .093 | .068 |
| 64 | .129 | .114 | .090 | .073 | .052 |
| 65 | .223 | .196 | .159 | .132 | .096 |
| 66 | .115 | .104 | .087 | .076 | .059 |
| 67 | .087 | .083 | .074 | .068 | .058 |
| 68 | .145 | .145 | .141 | .138 | .132 |
| 69 | .164 | .170 | .176 | .180 | .187 |

Source: Calculations undertaken by Courtney Coile on behalf of the author.
Notes:
[a] The average is roughly 5 percent.
[b] Assumes a roughly 9 percent individual discount rate.
[c] Assumes a roughly 12 percent individual discount rate.
[d] Assumes a roughly 17.5 percent individual discount rate.

It is worth emphasizing the limitations of the modeling strategy adopted here. The evidence suggesting a preference for lump-sum payments also suggests that the classical discounting approach may not be appropriate for modeling decisionmaking. If that is the case, the approach adopted here is problematic, since it is fundamentally predicated on comparisons of expected present values using classical discount functions. More broadly, the approach highlights that the individual discount rate may be higher than the Social Security discount rate, but it adjusts for that divergence only with regard to the DRC. In addition, the model does not capture the potential reversal of incentives under the lump-sum payment approach one year after the normal retirement age (discussed above). It therefore does not produce the concentration of benefit claiming that could occur if the proposal were actually implemented.

In addition, the model assumes that all individuals have the same underlying mortality rates. In reality, the proposed reform would introduce an important difference relative to the current system: the lump-sum approach would be more beneficial for those with *shorter* life expectancies than the existing DRC system. Given that higher-income individuals tend to live longer than lower-income individuals, the proposed reform would make the Social Security system more progressive.[13] The model does not reflect these income-specific effects. In addition, at any given lifetime income level, the proposed reform would redistribute Social Security benefits from longer-lived beneficiaries to shorter-lived beneficiaries. Because longer-lived beneficiaries at any given income already enjoy higher lifetime benefits than shorter-lived

[13] For evidence on differential mortality rates by socioeconomic status, see, for example, Aaron (1977) and Feinstein (1993).

beneficiaries, this redistribution may reduce such inequality in the Social Security system.

Finally, one effect that is difficult to analyze is whether, given the elimination of the earnings test for individuals over the normal retirement age, workers will prefer to claim benefits at the normal retirement age and invest the funds themselves rather than delay claiming to earn the lump-sum payment. This issue highlights the divergence between labor supply decisions and benefit claiming, which is mentioned in a footnote above but is not explored in detail in this *brief*.

Despite these important caveats, the basic result — of some increase in labor supply — seems plausible given the strong survey and other evidence that the current DRC provides only a weak incentive for continued work.

# Impact on Elderly Poverty Rates

The proposal could have two offsetting effects on poverty rates. On the one hand, the proposal may induce more beneficiaries who would claim benefits before the normal retirement age under the current system to wait until past the normal retirement age. That delay would raise their monthly benefit levels and potentially reduce poverty rates. On the other hand, to the extent that the lump sums will be consumed rather than saved, the proposal may *raise* poverty rates among those who already delay claiming benefits until after the normal retirement age.

The empirical evidence suggests that this second effect would likely be small as long as the lump-sum payment system were restricted to individuals over the normal retirement age. The implication is that the proposal could reduce elderly poverty rates somewhat, since the positive effect from delayed claiming would dominate the negative effect from consuming the lump sums. If the proposal were extended to individuals younger than the normal retirement age, however, the adverse effect on elderly poverty rates could become substantial. The discussion below focuses primarily on the potential adverse poverty effects if the lump sums were mostly consumed rather than saved.

If the lump sum were mostly saved, it would provide more protection against poverty among the oldest old than if the lump sum were mostly consumed immediately.[14] The field of behavioral economics, which provides one of the motivations for the proposed reform, highlights the difficulties that individuals have in disciplining themselves and thus suggests that some people may immediately consume a large share of the lump sum. The same field also suggests, however, that individuals are more likely to save a larger share of a lump sum as the size of the lump sum increases (Thaler, 1992). Thus, the degree to which the lump sum would be saved is unclear.

Even if the lump sum were entirely consumed, the adverse poverty effects may be quite small *as long as the system is restricted to those over the normal retirement age*. The Social Security Administration (2000) concluded that even if elimination of the earnings test at age 65 (as effected by the Senior Citizens Freedom to Work Act of 2000) induces all beneficiaries who currently delay past age 65 to claim at age 65, and even if none of the earlier benefits are saved rather than consumed, elderly poverty rates would not be significantly affected. Therefore, the implication is that among those who currently delay claiming benefits past the normal retirement age, consuming the entire lump-sum payment would not cause a significant increase in elderly poverty rates.[15] Furthermore, among those who currently claim benefits *before* the normal retirement age and who are induced to defer claiming past the normal retirement age because of the lump-sum payment, benefit levels would be at least as high as under current law even if the entire lump-sum payment were consumed. The conclusion is that the lump-sum system would be very unlikely to cause an increase in elderly poverty rates.[16]

[14] In the absence of an ability to borrow against future annuity payments or other means of inter-temporally shifting resources, the current system effectively represents a forced saving program (i.e., future income is raised in exchange for reductions in current income). Policymakers may therefore become interested in maximum distribution rules to restrict the ability of workers to consume the lump sum immediately. Such rules may, however, introduce additional complexity and also reduce the attractiveness of the lump-sum option.

[15] It is assumed that beneficiaries would not delay claiming benefits if the loss of Social Security income in the meanwhile would cause them to have incomes below the poverty threshold.

[16] Indeed, the reform may cause a decline in poverty rates if the lump sum is mostly saved and if beneficiaries who would claim benefits before age 65 under the current system are instead induced to wait until past age 65 to claim benefits (as Table 3 suggests would occur to some degree). It is important to note, however, that this *brief* assumes that survivors' benefits are raised under the proposed system as under current law in response to delayed claiming (see discussion in text above).

A much more significant danger would arise if the lump-sum approach were extended to people younger than the normal retirement age (see discussion above). In that case, if the lump sum were consumed rather than saved, the effect on elderly poverty rates could be significantly harmful. The basic intuition is that benefit levels for those who have waited until at least the normal retirement age to claim benefits currently contain a significant cushion against poverty.[17] If the lump sum were awarded for any delayed claiming beyond age 62, and if the lump-sum payment is mostly consumed rather than saved, the effect on elderly poverty could be significantly negative because the reduced monthly annuity payments (reflecting only the benefit available at age 62) would be insufficient to keep many elderly families out of poverty. The Social Security Administration study mentioned above found that if 100 percent of beneficiaries claimed at age 62, and if the earlier benefits were entirely consumed, the elderly poverty rate would rise significantly, from 12.0 percent to 13.9 percent.[18] The poverty rate among surviving spouses would rise from 19.2 percent to 22.9 percent. A lump-sum payment for delayed claiming beyond the earliest eligibility age, if the lump sum were mostly consumed, could produce similar increases in elderly poverty rates.

# Conclusion

The proposal to reform the DRC by awarding workers a lump-sum payment rather than an increased annuity payment deserves further scrutiny. The proposal may induce more beneficiaries to delay retirement, which would be beneficial from a macroeconomic and budget perspective. On the other hand, the details of the proposal require more thought; some of the difficult design issues are discussed above.

The most significant danger from the proposed reform is that it could be extended to people younger than the normal retirement age. A system that awarded the annuity payment earned at the earliest eligibility age, plus a lump-sum payment for delaying claiming beyond that age, could cause a significant increase in elderly poverty rates.

[17] See Gruber and Orszag (1999).

[18] See SSA (2000), Table 3.

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## About the Center

The Center for Retirement Research at Boston College, part of a consortium that includes a parallel center at the University of Michigan, was established in 1998 through a 5-year $5.25 million grant from the Social Security Administration. The goals of the Center are to promote research on retirement issues, to transmit new findings to the policy community and the public, to help train new scholars, and to broaden access to valuable data sources. Through these initiatives, the Center hopes to forge a strong link between the academic and policy communities around an issue of critical importance to the nation's future.

## Affiliated Institutions

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