

# EXCHANGING DELAYED SOCIAL SECURITY BENEFITS FOR LUMP SUMS: COULD THIS INCENTIVIZE LONGER WORK CAREERS?

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## Motivation

This paper models the factors that influence which individuals would be willing to trade off Social Security benefits in exchange for an actuarially fair lump sum, and we examine how this reform might influence work, retirement, and life-cycle well-being. We explore these key outcomes by developing and implementing a realistically calibrated life-cycle model with forward looking rational agents with endogenous labor supply, saving, investment, and retirement decisions, while allowing for time-varying investment opportunity sets and risky labor income.

## Framework

We previously developed a realistic discrete time life-cycle model of endogenous work hours, retirement behavior, consumption, and portfolio choice. Here we extend this approach by allowing for uninsurable labor income risk and capital market risk; we also incorporate individual risk aversion, time preferences, and leisure preferences, and uncertain mortality. In each period, the consumer must decide how much to work, consume, and invest in the capital market. We also implement a realistic approach to Social Security benefits, where the worker may claim a benefit between the early retirement age (ERA) of 62, and the late retirement age (LRA) of 70. If she claims prior to her normal retirement age (NRA), she receives a permanently lower benefit for life; if she claims later, her Social Security benefit payment is increased by the delayed retirement credit. For our alternative scenario, we examine how retirement behavior would change if the individual could take a part of the Social Security benefits as a lump sum payment by working beyond the NRA. This lump sum payment equals (in present value) the additional lifelong benefit stream paid to the worker claiming Social Security benefits after the NRA.

Several factors might be anticipated to lead people to favor a lump sum over an annuity stream. For instance, people might wish to leave a bequest, have a higher or lower discount rate, value leisure strongly, or be very risk-averse. Other influences could include changes in the retirement system such as a lower replacement rate or a higher normal retirement age. We also explore how financial sophistication might shape peoples' responses to the Social Security lump sum option versus the annuity. This takes into account the finding that many Americans lack knowledge of and easy access to sophisticated financial instruments such as equities. Finally we provide a welfare analysis to evaluate whether converting deferred Social Security benefits into a lump sum can enhance workers' well-being.

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## Results

Under the Social Security system's current rules, a worker who delays claiming her benefit until after the Normal Retirement Age is entitled to a benefit increase of about 8 percent per year that retirement is deferred. In our model, an individual who opted to work to age 66 instead of claiming benefits at age 65 could alternatively receive a lump sum worth about 1.2 times of her age-65 benefit, plus the age-65 benefit stream for life. Similarly, an individual deferring retirement even later, to age 70, would receive a lump sum worth about six times her starting-age benefit payment, plus the age-65 benefit stream for life.

We seek to evaluate whether this potential approach to Social Security reform would induce workers to retire later on a voluntary basis. We show theoretically that such a policy has the potential to increase retirement ages substantially, with little or no decline in welfare. Three factors help explain why the lump sum reward for deferred retirement can induce more work while not decreasing lifetime utility. First, many people would prefer to have a lump sum rather than an addition to their lifetime Social Security benefit, as this affords them flexibility over the timing of their consumption decisions. A second reason is liquidity driven: that is, people may desire to leave a stock of assets to their heirs. And third, financially sophisticated individuals able to participate in the equity market will find attractive the opportunity to invest some of their lump sum amounts. It is also worth noting that offering a lump sum equivalent in expected present value to the delayed retirement credit would be cost-neutral to the system, on average. Additionally, if older individuals worked longer voluntarily, this could enhance system solvency via additional payroll tax collections.

Our results show theoretically that, in a base case, giving the delayed retirement credit as a lump sum would boost average retirement ages by 1.5–2 years. Moreover, the probability of working beyond the normal retirement age ranges from 29 percent to 86 percent for the young, and from 4 percent to 49 percent for 60-year olds. Results vary across individuals of different types: the effect is even larger for less risk-averse households, while the most risk-averse respond least. Financially unsophisticated households (i.e., who lack access to the equity market) are also relatively unresponsive to the lump sum option; even here, though, the less risk-averse tend to work longer and retire later. Results do not change for households with a bequest motive. Accordingly, providing a lump sum does not simply result in wealth transfers to the next generation, consistent with the rationale for Social Security as a national social insurance scheme intended to support consumption for the elderly. Additionally, such a lump sum policy would generally not detract from well-being: in the base case, young workers have virtually no change in lifetime utility, whereas older individuals gain slightly.

## Conclusions

In the years to come, US policymakers will be actively seeking ways to reform Social Security to restore the system to solvency. Proposing cuts in benefits tends to be quite politically difficult, whereas offering a fair lump sum in place of the delayed retirement annuity credit may be more politically attractive. In addition, if people do delay their retirement ages and work longer, they would continue to pay Social Security payroll taxes for more years, which could help restore system solvency via additional payroll tax collections. Moreover, such a policy could be designed to be cost-neutral, albeit in the real world one would also need to consider additional issues including spouse and survivor benefits, changes in annuity factors, sudden demands for liquidity due to health shocks, and other factors.

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