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By Alicia H. Munnell, Alex Golub-Sass, and Nadia Karamcheva*

Introduction

When to claim Social Security is one of the most important decisions Americans make when approaching retirement. Currently, retirees can choose between claiming at the Full Retirement Age[1] and receiving full benefits, claiming as early as age 62 but receiving reduced benefits, or delaying retirement to as late as age 70 and collecting higher monthly benefits. The reductions and the delayed retirement credits are approximately actuarially fair for the person with average life expectancy. Early retirement benefits are lowered by an amount that offsets the longer period for which they will be received. The delayed retirement option offers higher benefits but for a shorter remaining lifetime. Thus, on average, workers will receive the same lifetime benefits regardless of when they claim between the ages of 62 and 70.

Recently, several unconventional claiming strategies have come to light that have the potential to pay higher lifetime benefits to some individuals and increase system costs.[2] This *brief* focuses on one of these strategies, which we call the "Free Loan from Social Security" strategy. The first section outlines the procedure and incentives of employing this strategy. The second section, using data from the *Health and Retirement Study*, presents estimates of the cost to Social Security under three different scenarios and describes who would gain. The final section concludes that the estimated annual $5.5 billion to $11.0 billion cost of allowing free loans from Social Security is likely to increase substantially over time.

Free Loan from Social Security

This strategy originates from a little-known part of the law that allows individuals who are already collecting benefits to change their minds and start over.[3] For example, an individual can claim Social Security at age 62 and then reclaim at age 70 and receive a higher benefit, provided he pays back the benefits he has received. Because the claimant is only required to return the nominal amount of the collected benefits, he could invest the money that he receives and keep the interest.[4] In essence, the claimant is a borrower who is required to pay back only the principal of a "loan," making this strategy akin to an interest-free loan from Social Security. An individual with average life expec-

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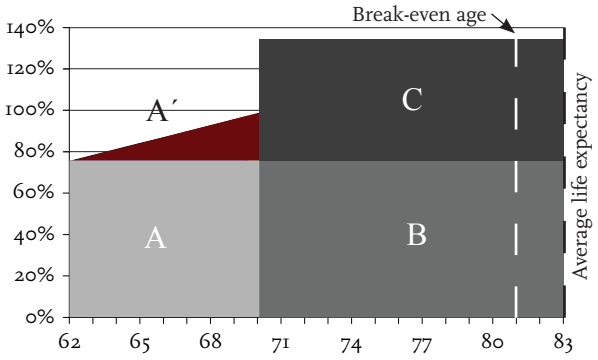
tancy will increase his lifetime benefits by the amount of the investment earnings. Should the claimant die before reaching average life expectancy, this strategy will involve a loss. But the strategy always dominates simply claiming at age 70 because it provides "early retirement" benefit payments for those who die prior to age 70 and the additional interest for those who "repay the loan" and reclaim at 70.

An example might help. Based on Social Security life tables, the average 62-year old born in 1944 has a life expectancy of approximately 21 years. His Full Retirement Age is 66, at which point he is entitled to 100 percent of his primary insurance amount (PIA).[5] If he opts for early retirement at 62, he will receive 75 percent of his PIA; if he postpones retirement past 66, he will accrue delayed retirement credits, culminating in a maximum benefit of 132 percent of PIA at age 70. As already noted, under conventional claiming strategies Social Security is actuarially fair. In other words, the average retired individual with a life expectancy of 83 will receive the same lifetime benefits no matter what age between 62 and 70 he claims. In Figure 1, areas A and B show the benefits received if the individual claims at 62, while areas C and B are the benefits received if claiming at 70. The value of area A, the benefits earned before 70, is equal to the value of area C, the change in benefits due to delayed retirement. If that same individual takes advantage of the "Free Loan from Social Security" strategy he will collect benefits equal to area A and earn interest on A equal to A´, but he needs to pay back only area A. In total, then, this individual would end up with a Social Security benefit equal to areas B and C and an investment gain equal to A´.[6] The gain to the individual and the loss to the system is therefore the value of A´.

Figure 1. Percent of PIA Received with the "Free Loan" Strategy, by Age



Note: This example assumes an individual with a Full Retirement Age of 66 and life expectancy of 21 years at age 62. Because the figure does not show the present discounted value of future benefits, area A does not equal area C.
Source: Authors' illustration.

The implication from Figure 1 is that any individual with average life expectancy – age 83 – will benefit from implementing this strategy and his gain is area A´. But some individuals whose life expectancy is lower than the average can also benefit. Assume that the individual who claimed at 70 adopts the "Free Loan" strategy. He first claims at 62, invests the benefits paid to him, and reclaims at 70. As noted above, reclaiming at 70 requires the individual to pay back the value of the benefits received over the prior eight years, but not the interest. Keeping the interest gives him a 'head-start' on reaching the break-even age compared to an individual claiming at 62 under the conventional strategy. To break-even, he simply needs to live until he receives total benefits from Social Security that, together with the interest, add up to the total benefits received by a conventional age-62 claimant. Because of the interest earnings, this point occurs at age 81.[7]

Cost to the System

The gains to individuals imply a cost to the Social Security system. To calculate the total cost to the system we use the earnings data from the *Health and Retirement Study*, a nationally representative survey of older Americans, to estimate each respondent's PIA and his potential welfare gain.[8] In our most conservative scenario, we calculate the cost assuming every individual aged 70 who is likely to benefit from the strategy in 2006 takes advantage of it.[9] To estimate the potential annual cost – defined as the lifetime cost for 70-year-olds in each year – we assume that every 70-year-old has previously claimed benefits at age 62 and is now facing the decision on whether to employ this strategy. For simplicity, we assume that retiring spouses with a work history – who might normally receive a spousal benefit – claim benefits based on their own earnings record.

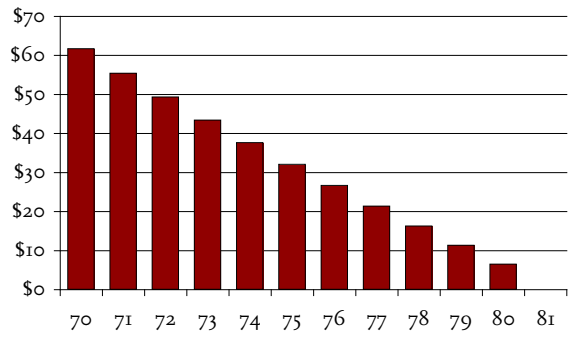
Life Expectancy Only

As we already saw, the strategy is only beneficial if the participant who reclaims at 70 lives long enough such that the value of the higher delayed retirement benefits, plus A´ (from Figure 1), exceeds the value of the benefits returned at age 70. (Box 1 describes the potential losses for those with shorter life expectancy). Because we are unaware of every individual's subjective mortality at age 70, we assign probabilities of living to the breakeven age based on each individual's gender, race, and educational attainment. We then multiply each person's potential gain by the probability that the individual will be alive at age 81 to determine the expected loss to the system.[10] Based on these probabilities and assuming that all individuals age 70 in 2006 had previously claimed Social Security benefits at age 62, the expected cost to the system would have been $11.0 billion (equivalent to area A´ in Figure 1). Total costs would actually be higher because delayed claiming would increase survivor benefits for couples. Moreover, many women are eligible to receive a spousal benefit based on their husband's earnings. Applying the "Free Loan" strategy to spousal benefits has the potential to further increase the cost to Social Security.[11]

Box 1. Potential for Loss

This "Free Loan" strategy also raises the specter of potential loss to individuals who die shortly after repaying their age 62-70 benefits. For an individual with the median benefit, the loss starts at $62,000 – the required repayment of benefits – and declines steadily until he reaches his break-even age.

Figure 2. Loss Experienced by Employing "Free Loan" Strategy, by Age of Death, Thousands of Dollars



Sources: Authors' calculations from University of Michigan, *Health and Retirement Study* (HRS), 2006; and U.S. Bureau of Labor Statistics, *Current Population Survey* (CPS), 2006.

Moderate Financial Constraints

Not everyone healthy enough to gain from the strategy will be able to implement it. Many individuals face considerable financial constraints. Since a retiree cannot use his Social Security benefit if it is being invested, he must have enough wealth to live on while employing this strategy. We therefore restrict the sample of potential participants in the strategy to include only individuals who have net worth of at least twice the amount that they would need to repay at age 70, less the earned interest. The resulting estimated cost to the system would then be about $8.7 billion.

Strict Financial Constraints

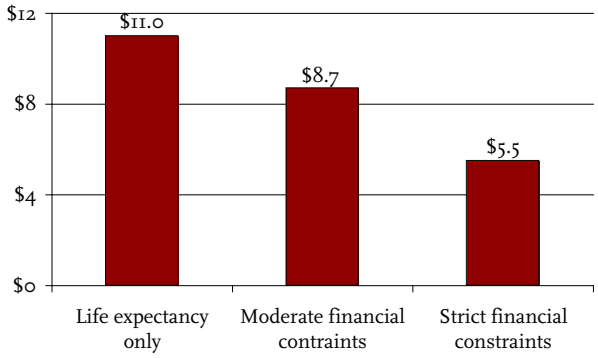
The moderate financial constraint assumes that all of an individual's net worth will be available as a financial resource for implementing the strategy. In practice, one can see how assets such as real estate, vehicles, or businesses would not be liquid enough to be viable financial resources for utilizing this strategy. Thus, we further restricted the sample to include only individuals who are likely to possess *financial* assets twice the amount needed to repay at 70 minus earned interest. The total cost to the system then drops to $5.5 billion (see Figure 3 on the next page).

There is a distinct possibility that financial institutions could worsen the situation for Social Security. An opportunity exists for lenders to loan money to those individuals who are financially ineligible for the strategy in exchange for a portion of their potential increase in benefits.

Who Will Actually Benefit?

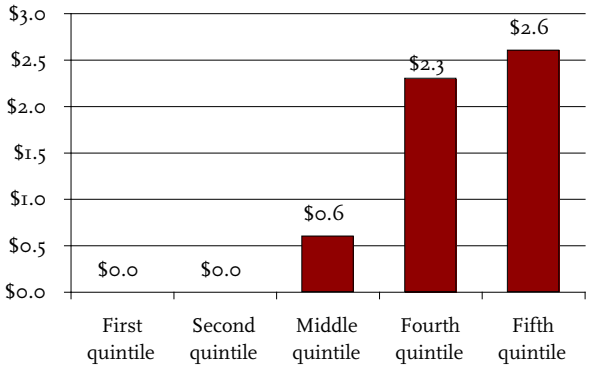
The wealth and life expectancy required for this strategy limit its use. In terms of life expectancy, roughly 60 percent of men and 70 percent of women at age 70 are expected to live long enough to break-even on this strategy. Adjusting for moderate financial constraints will cause the percent of men and women

Figure 3. Total Cost to Social Security, Billions of Dollars



Sources: Authors' calculations from 2006 HRS; and 2006 CPS.

Figure 4. Potential Gain Under Strict Financial Constraints, by Wealth Quintile, Billions of Dollars



Source: Authors' calculations from 2006 HRS.

who take advantage of the strategy to drop to 46 percent and 56 percent, respectively; strict financial constraints will lower the share to 30 percent for men and 32 percent for women.

Good health and financial assets are not randomly distributed in the population. As a result, most of the $5.5 billion of expected gains under strict financial constraints are very concentrated – they accrue to individuals in the top two quintiles of the wealth distribution (see Figure 4). Therefore, the "Free Loan from Social Security" strategy creates more inequity between those who can afford their retirement and those who are at risk of not being financially prepared to retire.

Conclusion

With the aging of the population, Social Security is facing shortfalls that will require modifications to the current system. Therefore, policymakers will be looking for ways to trim costs. Social Security was not designed to give zero-interest loans to those who can afford to retire without their monthly benefit. The $5.5 billion to $11.0 billion annual gain to high-income households will result in a comparable cost to the Social Security program.

Moreover, the system could be at even greater risk in the future because the number of people who could take advantage of the zero-interest loan strategy will increase for three reasons. First, as the population ages, there will be more people claiming Social Security. Second, the rise in the Full Retirement Age reduces benefits, which also reduces the amount that individuals would need to pay back if adopting this strategy. Third, due largely to the shift to 401(k) plans, future cohorts will have more liquid assets available to take advantage of this strategy. In short, the potential cost of this strategy will continue to rise and Social Security will be left with the bill.

APPENDIX

Calculation of the Cost of the "Free Loan" Strategy

The analysis is based on 392 individuals age 70 in the 2006 *Health and Retirement Study* (HRS).[12] The HRS restricted and self-reported earnings data make it possible to calculate Social Security's primary insurance amounts (PIAs) and household wealth at age 70 for each individual.

The PIA is used to calculate the amount of interest recipients could have earned if they had initially claimed Social Security benefits at age 62 and then reclaimed at a later age. The assumed interest rate is 3 percent. (To estimate steady state annual costs, we assumed a Full Retirement Age of 66 and delayed retirement credits of 8 percent for each year benefits are postponed. The analysis also assumes that individuals make claiming decisions independently of their spouses.) Although people younger than 70 could take advantage of the ability to reclaim (that is, a person could claim at 62 and then reclaim at 64), we think that evaluating the extreme case of claiming at 62 and reclaiming at 70 provides a clear minimum cost to the system.

To identify those individuals who would gain by pursuing the reclaiming strategy, we would like to have the life expectancy for each individual. While the HRS reports the individual's assessment of his or her probability of living to a given age, this information does not easily translate into subjective life expectancy. Thus, we adopted an alternative strategy that began with data from the Social Security Cohort Life Tables showing that, at age 70, 60 percent of men and 70 percent of women will live to 81. We then used relative mortality rates for 12 gender-race-education categories from Brown, Liebman, and Pollet (2002) to calculate the probability of each individual living to the break-even age of 81.[13]

To calculate the potential gain to the entire 70 year-old cohort, we multiplied each individual's potential gain by the probability that he or she would be alive at age 81. The HRS weights were then applied to calculate averages for the entire population age 70 in 2006. The total cost to Social Security is then found by multiplying those averages by the actual number of men and women age 70 from the 2006 *Current Population Survey*.

The next step is to identify those individuals who have the required assets to exercise this strategy. This calculation requires a series of assumptions. First, in the case of couples, if benefit information for the spouse is not available, we assume that the head of house has access to all the household's assets. Second, if benefit information for the spouse is available, we assume that the couple will choose to exercise both the husband's and the wife's strategy subject to their financial means. If the couple lacks the resources to pay back both benefits, the couple will choose to repay the higher benefit. If the couple cannot afford to repay the higher benefit, it will repay the lower benefit to the extent feasible.

With these assumptions, we impose two alternative financial constraints. Under the moderate constraint, we limit those who can take advantage of this strategy to individuals with total assets in excess of twice their age 62-70 benefits. Under the more restrictive constraint, we define assets to include only *financial* wealth. Based on these restrictions, we calculate the percent of financially unconstrained men and women and their mean gain from the strategy.

Endnotes

1 The Full Retirement Age (FRA) is scheduled to increase from age 65 to age 67 by 2022. The increase began with individuals born in 1938, for whom the FRA is 65 plus 2 months, and increases 2 months per year until it reaches age 66. Then after a 12-year hiatus, the FRA again increases by 2 months per year until it reaches age 67 for individuals born in 1960 or later.

2 See Kotlikoff (2008) and Hershey (2008).

3 This claiming approach had its origins in the case of an individual who initially claimed benefits in 1957 and later requested that she be allowed to re-file in 1964 in order to obtain a higher monthly benefit based on her more recent work history and older filing age. The Social Security Administration granted this request on the grounds that it was in the best interest of the claimant to rescind the original claim.

4 The amount that needs to be repaid includes any Medicare premiums deducted from the benefit the individual received.

5 The PIA is the benefit available at a worker's Full Retirement Age.

6 The correct comparison of lifetime benefits requires discounting, which was ignored in the graphical analysis for the sake of readability.

7 The original break-even age is calculated by finding the time T at which

$$\sum_{t=62}^{T} \frac{Ben_{62}}{(1+d)^{t-62}} = \sum_{t=70}^{T} \frac{Ben_{70}}{(1+d)^{t-62}}$$

where Ben_{62} is the benefit level an individual receives beginning at age 62, Ben_{70} is the benefit level an individual receives beginning at age 70, and d is the discount rate. Because, under the "Free Loan" strategy, individuals are permitted to keep the interest they earn on their benefits, the new break-even age is calculated by finding the time T at which

$$\sum_{t=62}^{T} \frac{Ben_{62}}{(1+d)^{t-62}} = I + \sum_{t=70}^{T} \frac{Ben_{70}}{(1+d)^{t-62}}$$

where I is the interest earned on benefits between the ages of 62 and 70.

8 To present a static annual cost, PIA adjustments for individuals aged 70 in 2006 were calculated to coincide with future cohorts.

9 Individuals in poor health who do not plan on living to the break-even age have the option of paying back their benefit before age 70. If an individual had previously planned on claiming at the FRA, he still gains from claiming at 62 and reclaiming at the FRA. The individual still gains the interest payments, making the strategy attractive to those who may not live into their 80s.

10 For more details, please see Appendix.

11 Note that spousal benefits max out at age 66 since these benefits do not accrue delayed retirement credits.

12 To check the validity of our sample size, we augmented our sample to 813 by projecting the wealth of individuals age 69 by one year and treating them as if they were age 70. The resulting cost from our inflated sample was comparable to our initial result.

13 If an individual did not fall into one of the 12 groups, they were assigned gender-specific cohort mortality.

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The Center for Retirement Research at Boston College was established in 1998 through a grant from the Social Security Administration. The Center's mission is to produce first-class research and forge a strong link between the academic community and decision makers in the public and private sectors around an issue of critical importance to the nation's future. To achieve this mission, the Center sponsors a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources. Since its inception, the Center has established a reputation as an authoritative source of information on all major aspects of the retirement income debate.

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