### The Case for Borrowing Against Future Social Security Wealth

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#### Abstract

In perfect credit markets, borrowing against future income could help households weather financial storms due to unexpected costs. Borrowing against future income could also help households invest in human or physical capital. Nevertheless, with lower earnings and little wealth accumulation, households most in need of financial resources are likely limited to higher cost loans or denied altogether access to credit markets. We propose allowing individuals to borrow against their future Social Security benefits by taking a lump-sum payment in exchange for reduced benefits during retirement. We provide examples of loan amounts that would be available to workers of different ages and earnings and propose limits to the program to preserve retirement benefits.

### Introduction

Many households experience shocks that strain their finances. The ability of households to weather these financial storms differs across demographic groups, with younger, lower-income, lower-education, Black/African American and Hispanic/Latino households more likely to be financially vulnerable (Lin, Bumcrot, Mottola, Valdes, Ganem, Kieffer, Walsh and Lusardi, 2022, 3-6). In perfect capital markets, borrowing against future income could relieve financial pressure felt by individuals. Loans might also be a source of funding for big ticket items such as down payments for home ownership or college tuition. Nevertheless, with lower earnings and little wealth accumulation, households most in need of financial resources are likely limited to higher cost loans or denied access to credit markets.

Fortunately, there is a source of wealth on the balance sheet of nearly every U.S. household that, in theory, could be tapped to smooth consumption and pay for unanticipated expenses: Social Security. Virtually every individual contributes to Social Security in their lifetime, and more than 96 percent of the retired-age population eventually receive benefits (Whitman, Reznik, and Shoffner, 2011). We propose allowing individuals to receive a lump-sum of up to 30% of the present value of their future Social Security wealth in exchange for reducing their Social Security benefits by the same percentage.

In the following policy analysis, we discuss the need for credit access, especially for lowincome households, and how borrowing against future Social Security wealth would help ensure financial security. The conversation outlines how such a program might work including eligibility of borrowers, the terms of the loan and who might benefit most. The analysis estimates loan parameters for different age and income cohorts using Social Security actuarial assumptions.

The idea of a lump sum payout based on future Social Security wealth is not a new idea. Maurer and Mitchell (2021) examine the willingness of adults to delay retirement in return for a lump sum payment at the full retirement age of 66 or 67. Whereas Maurer and Mitchell only investigate whether individuals would postpone retirement from 62 to 66 or 67 in exchange for a lump sum instead of a larger annuity, the policy proposed here extends the idea of temporal shifting of Social Security wealth to earlier periods of an individual's life cycle. In that way, a household may borrow during a time when they need funds to pay expenses or diversify their portfolio by investing in other assets such as a home.

# Background

#### The Need for Access to Funds

Beginning in 2013, the Federal Reserve Board has conducted a survey of U.S. households to gauge their economic health. In 2021, the Board found that 50 percent of households with incomes less than \$25,000 answered that they could not pay all monthly bills or were one unexpected \$400 bill away from being unable to pay them. In contrast, only 5 percent of high-income households gave the same answer (Board of Governors of the Federal Reserve System, 2022, 35). Households frequently skipped medical treatment because of cost. For families with income below \$25,000, 38 percent sacrificed medical care due to cost compared to only 9 percent for families with income greater than \$100,000 (Board of Governors of the Federal Reserve System, 2022, 38). Economic disruptions including income loss, property damage, displacement or injury or death of a relative also had a greater impact on low-income people, as depicted in Figure 1.



Source: Board of Governors of the Federal Reserve System (2022)

Lower income households experienced psychological costs, too, as nearly two thirds of families with income below \$25,000 claimed that personal finances produced anxiety (Lin, 2022). Given both economic and psychological costs, it is important for households to have access to funds that can be used to pay obligations, finance unanticipated expenses, or use for home down payments and major consumer purchases. Unfortunately, the Federal Reserve Board finds that in 2021, only 81 percent of adults were "fully banked" (Board of Governors of the Federal Reserve System, 2022, 43). An additional 13 percent were "underbanked" and utilized higher cost loans to smooth consumption or substitute for lost income. The remaining 6 percent of adults had no bank account, with less than half the "unbanked" using alternative financial services. Individuals with income less than \$50,000 represent 70 percent of underbanked and 91 percent of unbanked (Board of Governors of the Federal Reserve System, 2022, 44).

## A Source of Funds

With limited access to financial services, households potentially have two other sources of wealth to tap for economic interruptions, home equity or retirement accounts. However, fewer than half of low-income households have any home equity to access (National Association of Realtors,

a, n.d.).<sup>1</sup> Similarly, twenty five percent of non-retirees have no retirement savings including private pensions, 401(k)/403(b) accounts, or IRAs. Of those that do have retirement accounts, 8 percent accessed their funds in 2021(Lin, et al, 2022, 79).

Looking specifically at the State-Sponsored IRA program "OregonSaves", Quinby, Munnell, Hou, Belbase, and Sanzembacher (2020) show that 20 percent of employees with positive balances made pre-retirement withdrawals. More broadly, Biggs, Munnell and Chen (2019) show that retirement account balances are generally below their potential due to program immaturity, lack of universal coverage, leakages and fees (Biggs, Munnell and Chen, 2019). Pre-retirement withdrawals or lack of retirement savings further constrains households to access funds to weather economic hardships.

Given limited banking resources and few if any current assets to expend, households frequently resort to delaying payment of bills, doing without or incurring additional costly debt. There is, however, one significant source of wealth for nearly every U.S. household, Social Security, that could be used to address economic disruptions. Workers and employers contribute a combined 12.4 percent of the first \$147,000 of income (in 2022) with benefits based on the highest 35 years of earnings. Virtually all individuals that reach the age of 62 receive or eventually receive Social Security benefits.<sup>2</sup>

Gustman, Steinmeier and Tabatabai (2010) find for the bottom two wealth deciles, Social Security comprises 89.9 and 78.3 percent of total household wealth. Social Security as a portion of total wealth monotonically declines with household assets, falling to 11.1 percent for the top decile. These results reflect both the progressive nature of Social Security and the greater wealth accumulation through private pensions, stock and housing for households of higher means.

These results are consistent with Hou and Sanzenbachers' (2020) findings that Social Security is a great wealth equalizer across racial and ethnic groups. For Blacks and Hispanics in the bottom two wealth quintiles, Social Security is virtually all of retirement wealth. In a similar vein, Cottle Hunt and Caliendo (forthcoming) show that Social Security reduces inequality in an economy with

<sup>&</sup>lt;sup>1</sup> Ownership rates tend to overstate the percentage of household that have home equity as 7 percent of homes in 2021 are underwater, i.e., the loan balance exceeds the value of the home (Lin, et al, 2022, 4).

<sup>&</sup>lt;sup>2</sup> The exceptions include late arriving immigrants (55.2%), infrequent workers (34.7%), workers who die before claiming benefits (5.7%) and non-covered workers (4.7%). Source: "Research: Who Never Receives Social Security Benefits?" n.d.

limited economic mobility. Taken as a whole, these papers show the significance of Social Security wealth, especially for low-income and minority households.

Social Security differs in two important ways from other assets such as private retirement savings and housing: the earliest it can be accessed is at age 62 and it can only be paid as an annuity. As it currently stands, both features make it impossible for working-age households to utilize Social Security as a source of funds to pay for economic disruptions.

# **Intertemporal Shifting of Assets**

Intertemporal shifting of assets so that individuals may be paid a lump sum in exchange for future expected income is nothing new in private markets. Examples include reverse mortgages (see Change, n.d.), Bowie bonds (see, "Bowie Bond Definition," n.d.), Minor League baseball income advance agreements (Baer, 2021), and the option to receive lottery winnings as a lump-sum. Each case reverse engineers a future income stream and pays the individual today its lump sum (present value) equivalent.

Under the current Social Security System, workers have the option to retire early at age 62 in exchange for receiving smaller Social Security benefits. Workers who chose to delay retirement receive larger annuity benefits. Mauer, Mitchell, Rogalla, and Schimetschek (2021) consider a hypothetical alternative in which workers who delay retirement receive an actuarily fair lump-sum payment instead of a larger annuity. They show that this change would incentivize workers to retire about a year later, consistent with survey data (see Maurer and Mitchell (2021) and Mauer, Mitchell, Rogalla, and Schimetschek (2018)).

#### A Program of Borrowing Against Future Social Security Wealth – A Conceptual Framework

We propose a program that allows an individual to access a fraction of their Social Security wealth prior to the minimum withdrawal age of 62. The proposed program allows an individual to borrow against their expected Social Security wealth. The individual "pays back" the loan by accepting a lower monthly annuity that begins at the full retirement age (assumed equal to 67 in subsequent calculations).<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Our proposal is conceptually similar to the hypothetical Maurer, Mitchell, Rogalla, and Schimetschek plan. One important difference is that now an individual would be claiming a sum that depends upon an uncertain future cash flow since a person's Social Security benefit depends upon their lifetime earnings profile. In that sense, estimating future Social Security wealth is analogous to estimating the uncertain cash flow that backs a security such as a Bowie bond. However, here actuarial calculations based on the entire U.S. working population almost certainly leads to a relatively low standard error of Social Security wealth for a given cohort.

We determine the maximum amount an individual may borrow as a fraction of their expected Social Security Wealth. Expected Social Security wealth equals the present value of the expected benefit stream an individual will receive from the full retirement age until their death. The calculation depends upon the current age of the individual and their expected primary insurance amount. For the latter, we assume that an individual remains within their current earnings cohort. All calculations further depend upon Social Security life tables and expected mortality rates.

	Federal	75 percent		150 percent	Maximum
minimum		of average	Average	of average	taxable
	wage	wage	wage	wage	earnings
Average indexed					
monthly earnings	1,604	3,262	4,350	6,525	10,683
Primary insurance	1				
amount	1,083	1,621	1,974	2,551	3,183
Lump-sum available for a particular age, 30% benefit reduction					
30	19,923	29,803	36,286	46,903	58,517
40	25,417	38,021	46,291	59,836	74,651
50	32,773	49,026	59,690	77,155	96,258
60	43,688	65,353	79,569	102,850	128,316
67	55,474	82,983	101,034	130,595	162,930
Lump-sum available for a particular age, 20% benefit reduction					
30	13,282	19,869	24,191	31,269	39,011
40	16,945	25,347	30,861	39,891	49,767
50	21,849	32,684	39,793	51,437	64,172
60	29,126	43,569	53,046	68,567	85,544
67	36,982	55,322	67,356	87,063	108,620
Lump-sum available for a particular age, 10% benefit reduction					
30	6,641	9,934	12,095	15,634	19,506
40	8,472	12,674	15,430	19,945	24,884
50	10,924	16,342	19,897	25,718	32,086
60	14,563	21,784	26,523	34,283	42,772
67	18,491	27,661	33,678	43,532	54,310

Table 1. Loan or Lump Sum Payment Available at a Given Age

*Source:* Author's calculations based on 2021 Social Security Administration Statistical Supplement, Table 2.A.26, and SSA Life Tables.

Table 1 shows the lump sum an individual might borrow at a given age and considers three possible benefit reductions in the PIA. The highest reduction of 30 percent implies that an individual receives a monthly benefit equal to what they would have received had they retired at age 62. The only difference is that now they receive the early retirement benefit starting at age 67. Thus, payment of the loan reflects the foregone five years of payments plus lower monthly benefits. This repayment scheme ensures that the loan program is revenue neutral to the Social Security program itself.

Table 1 reveals that the lump sum an individual can borrow at a given age is quite substantial even for young, low-wage earning individuals. For example, a 30-year-old earning 75 percent of the average Social Security wage could borrow \$29,803. They would then receive their PIA reduced 30 percent starting at age 67. Benefit reductions of 10 or 20 percent would lead to smaller loans of \$9,934 and \$19,869 respectively.

Table 1 illustrates additional features. The closer the individual is to the full retirement age, the larger is the amount that they can borrow. Essentially, borrowing at age 62 imitates the Mauer and Mitchell plan. The table also reflects the progressive nature of Social Security. For example, at a 30 percent benefit reduction, the amount of the loan that a 30-year-old with 150 percent average income can borrow (\$46,903) is less than twice the size loan of a 75 percent wage earner (\$29,803).

#### Discussion

Figures in Table 1 confirm that borrowing against future Social Security wealth provides a considerable sum of money that households can use when they most need it during their working years. The offset is that it delays collecting their Social Security annuity until the full retirement age as well as reduces the monthly amount. Nevertheless, by setting a limit to the reduction in monthly benefits, it ensures that a retirement safety net remains in place. In Table 1, the 30 percent maximum reduction equals the discount future beneficiaries will incur if they receive benefits starting at age 62. In other words, current SSA guidelines already call for a 30 percent reduction of FRA benefits if taken early.

It takes 40 earnings quarters to qualify for Social Security benefits; however, the loan might be most valuable to younger workers. Thus, the Social Security Administration might consider offering the loan program to households with a worker who has earned at least 20 qualifying quarters. In that way, households with workers in their 20s might qualify for the loan program. Almost certainly, they would accumulate the additional 20 qualifying quarters over their remaining working horizon.<sup>4</sup>

The repayment of the loan could also be structured in a number of other ways. For example, repayment might begin subsequent to receiving the lump sum in the form of an additional one or two percent Social Security tax. Alternatively, the government could offer an income share agreement (ISA) as a repayment scheme. Under an ISA, the individual pays Social Security a portion of their income over a fixed time period. ISA can potentially build in a progressive repayment schedule to the proposed Social Security loan program, since borrowers with low income would repay less than borrowers with high income.<sup>5</sup>

# **Concluding Remarks**

The proverbial bump in the road is all too common for households of lower income. Frequently, they cannot meet expenses or forego health care and other necessities because they have little or no access to funds. Even if budgets are met, financial circumstances find that half of all lower income families do not own homes. Given access to funds, households could meet monthly budgets, avail themselves of necessary medical services, pay down expensive and burdensome debt and afford down payments to own a home. Fortunately, virtually all households participate in Social Security, and in many cases, the benefits constitute the family's major source of wealth. This brief shows that if households are able to tap into their Social Security wealth, it would enable them to smooth lifetime consumption, more easily build private wealth and generally provide for a better life.

<sup>&</sup>lt;sup>4</sup> There still remains the issue of benefits being a function of the highest 35 years of earnings. Projected future earnings can be factored into any loan terms.

<sup>&</sup>lt;sup>5</sup> ISAs are used by some colleges to finance tuition. For details, see, "Income Share Agreements - Purdue Moves -Purdue University." n.d. <u>https://www.purdue.edu/purduemoves/initiatives/affordability/income-share-</u> <u>agreements.php</u>. Income share agreements are not without their critiques. One study found that students at Historically Black Colleges and Universities paid more than otherwise similar white students using private income share agreements (Cowley, 2021). Thus, if SSA were to use ISAs as a form of repayment, it must be careful to enforce non-discriminatory practices.

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# Appendix

The lump-sum transfers for an individual of wage-type j available at age t in exchange for a  $\gamma$  reduction in benefits were calculated using the following formula:

$$L(t) = \frac{\sum_{i=t_R}^{T} \gamma \, b(j) \, \frac{S(i)}{S(t_R)} (1+r)^{t_R-i}}{\frac{S(t)}{S(t_R)} (1+r)^{t_R-t}},$$

where S(t) is the survival function showing the unconditional probability of being alive at age t, calculated from the Social Security Administration Life tables converted to unisex following Bell and Morris (2020) assuming a linear trend for monthly values. Age is denoted t and is measured in months. The full retirement age (67 years) is denoted  $t_R$  and the maximum possible age is denoted T. The real Social Security benefit of an individual with wage type j is denoted b(j) and is taken directly from the 2021 Social Security Administration statistical supplement table 2.A.26. An individual is assumed to have the same wage-type over the life cycle. Real benefit amounts correspond to the PIA an individual would receive at the full retirement age and are assumed to be constant during retirement. The real interest rate r is set to 2.3 percent as in the 2022 Social Security Administration Trustee Report, intermediate forecast.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> The low, intermediate, and high-cost real interest rate forecasts used by the SSA are 2.8 percent, 2.3 percent, and 1.8 percent respectively. These values appear in the 2019-2022 Trustees Reports.