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Social Security Wealth, Inequality, and Life-cycle Saving: An Update

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Most analysis of household wealth inequality is based on measured "marketable" wealth. That measures answers the question, "If a family were to sell everything they own, then pay off any debts they owe, how much would they have left?" Based on that narrow definition, there is widespread agreement that household wealth in the U.S. and many other developing countries is highly concentrated, and that wealth inequality has increased in recent decades.

The narrow focus on marketable wealth also affects how economists think about household saving and wealth accumulation over the life cycle. Textbook models suggest that families will accumulate wealth during their working years, then spend down that wealth after they retire and their income from working is reduced. This life-cycle prediction is generally borne out in the real world on average, but the simplest models do not explain why higher income families seem to save much more and accumulate more wealth (relative to income) than lower income families.

This study addresses these two empirical observations using an expanded measure of household wealth. Rather than limiting the analysis of wealth inequality and life-cycle saving to observed marketable wealth, the expanded wealth measures developed here include the value of retirement income claims not captured in the marketable wealth measures. The estimates of retirement wealth developed here are based on the present discounted value of retirement claims. The present discounted value of a retirement income benefit stream is useful because it is conceptually equivalent to a marketable wealth measure.

Consider, for example, the legal claims of a pension beneficiary who has participated in a traditional Define Benefit (DB) plan. The employer has issued a promise to pay that beneficiary a certain stream of income for as long as they live. That promise is much like a bond, or marketable debt obligation, with the added feature that the stream of income stops when the beneficiary dies. The present discounted value measure of that promise adds up the future payments, with each promised payment adjusted for the time value of money (like any other bond) and the probability that the beneficiary survives to receive that payment. In that sense, the present discounted value for DB pension benefits answers the question, "What would a financial market participant be willing to pay for that future stream of pension benefits?"

Social Security is more complicated because there are both taxes and benefits. Social Security wealth (SSW) is the present discounted value of future benefits an individual will receive less the present discounted value of future taxes they will pay. When an individual enters the labor force, they generally face a lifetime of taxes to pay before they will

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receive any benefits. Thus, their initial SSW is generally low or negative, because the present discounted value of taxes exceeds the present discounted value of benefits. As an individual works and pays into the system, their SSW grows and generally peaks somewhere around typical Social Security benefit claiming ages.

We estimate SSW for individuals in the Survey of Consumer Finances (SCF) for 1995 through 2019 using the survey's detailed labor force history and expectations modules. The SCF is a cross-section survey — meaning it collects data on individuals at one point in time. Computing SSW requires knowing the entire lifetime earnings history for an individual, because the Social Security benefit formula is a complex function of earnings in every year an individual works and pays into the system. We estimate earnings at every age for SCF respondents by extrapolating the information the survey collects on the current jobs, past jobs, and future work expectations. (In on-going work, we are refining our estimated earnings by age using administrative earnings data for statistically similar individuals in the Health and Retirement Study).

Adding SSW to existing measures of household wealth in the SCF leads to several key findings that affect the way economists think about wealth inequality and life-cycle saving. The first key finding is that aggregate SSW is quantitatively important when compared to other components of household wealth. Our baseline estimated SSW for all SCF respondents and their spouses/partners in 2019 was about $24 trillion, which is substantial compared to the $115 trillion in all other household wealth (including DB pensions).

The second finding is that SSW is relatively more important for low-wealth families at any given age, which is unsurprising given that low-wealth individuals have much lower lifetime incomes, and the Social Security tax and benefit formulas are progressive. For example, the bottom 50% of persons ages 35 to 44 in 2019 had average household wealth around $22,000. However, the same group had average expected SSW of just over $50,000, the difference between a PDV of benefits around $137,000 and a PDV of taxes around $87,000. In contrast, the top 10% of persons ages 35 to 44 in 2019 had, on average, about $2,000,000 of household wealth. Their expected SSW was $86,000, the difference between a PDV of benefits around $254,000 and a PDV of taxes around $169,000.

The third takeaway is that incorporating SSW into a more comprehensive measure of household wealth has a large impact on wealth inequality levels, but it does not change overall trends in top wealth shares. While the top 10% share of household wealth increased from 53% to 63% between 1995 and 2019, the expanded top 10% wealth share that includes SSW increased from 45% to 55%.

The final takeaway is based on connecting the estimated SSW values across cross-section survey waves for 10-year birth cohorts. By connecting the cohort average SSW between survey waves and drawing out the life-cycle patterns of SSW by age, we show how SSW starts out negative at young ages, increases steadily through retirement, and then gradually decreases during the remaining expected years of life (decline at older ages). These patterns can also be interpreted as much higher effective Social Security "saving rates" for low-wealth families. ❖

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Sponsor information: The research reported herein was performed pursuant to grant RDR18000002 from the U.S. Social Security Administration (SSA) through the Michigan Retirement and Disability Research Center (MRDRC). The findings and conclusions expressed are solely those of the author(s) and do not represent the views of SSA, any agency of the federal government, or the MRDRC.