

The Poverty-Reduction Effects of Social Security: Evidence from the 2025 CPS ASEC

Brendyn Marroquin

The Poverty-Reduction Effects of Social Security

Social Security is the primary source of retirement income and the main barrier to poverty for older Americans in the United States. But its significance extends further than replacing wages for older adults leaving the labor force. The program functions as a national insurance system that protects households from predictable economic risks including old age, disability, and the loss of a primary earner. For many beneficiaries, especially those without reliable pensions or substantial personal savings, it is their foundation for basic economic security and well-being. Since its establishment during the Great Depression, the program has expanded through many reforms, evolving into an institution providing economic protection for working Americans and their families.

This paper measures Social Security's poverty-reduction effects using microdata from the 2025 CPS Annual Social and Economic Supplement (ASEC) under both the Official Poverty Measure (OPM) and the Supplemental Poverty Measure (SPM). Poverty status is calculated using reported income, then recalculated after removing Social Security benefits to construct a counterfactual. Comparing these outcomes shows how many individuals would fall below poverty thresholds without the program and which groups rely on it most.

Background & History

Social Security emerged from the economic turmoil of the Great Depression, when mass unemployment and collapsing private savings left millions of older Americans without reliable income (McSteen, 2019). Employer pensions were limited and often unstable, and state-level poor relief could not meet the scale of need. In 1934, President Franklin D. Roosevelt created the Committee on Economic Security and tasked it with designing a national system capable of protecting workers against predictable risks such as old age and the loss of income (McSteen,

2019). Drawing on European contributory models and American experience with unemployment insurance, the committee proposed a federal retirement insurance program financed through payroll taxes. Congress passed the Social Security Act in 1935, establishing old age insurance, unemployment insurance, and means-tested old age assistance. Payroll taxes began in 1937, and monthly benefits, originally planned for 1942, were advanced to 1940 to begin payments sooner. The 1939 amendments expanded the program to include benefits for spouses, children, and survivors, shifting Social Security from an individual worker pension to a broader family-based form of social insurance (McSteen, 2019). Although early coverage excluded agricultural, domestic, and many public sector workers, the program quickly became a central pillar of the American welfare state.

Expansion

In the decades following World War II, Social Security expanded significantly. Economic growth and rising wages supported higher benefits and broader coverage. The 1950 amendments extended eligibility to many previously excluded groups and increased benefits, followed by further expansions throughout the 1950s. In 1956, Congress established Disability Insurance to support workers with long-lasting impairments, and in 1958 it added benefits for disabled adult children and dependents (Social Security Administration, n.d.).

The early 1970s marked another major turning point. Congress created Supplemental Security Income in 1972, establishing a federal means-tested benefit for aged, blind, and disabled individuals that was administered by the Social Security Administration but funded through general revenues. Soon after, lawmakers introduced automatic cost-of-living adjustments so that benefits would track inflation. Errors in the early formula caused unsustainable growth, prompting the 1977 amendments, which introduced the modern Average Indexed Monthly

Earnings system and a progressive benefit formula with bend points that adjust with national wage growth. These reforms established the basic structure that determines benefit levels today (Social Security Administration, n.d.).

Modern Framework

By the early 1980s, recession, high unemployment, and demographic pressures pushed Social Security toward a financing crisis. A bipartisan commission recommended a set of changes that Congress enacted in 1983. These reforms gradually increased the full retirement age from 65 to 67, raised payroll tax rates from 10.8% to the current 12.4%, extended coverage to newly hired federal workers and certain nonprofit employees, and subjected a portion of Social Security benefits to federal income tax for higher income households, with the revenue credited back to the trust funds (Historical Background and Development of Social Security, n.d.). The legislation also increased incentives to delay retirement by expanding the delayed retirement credit. These reforms restored near-term solvency and established the long-term actuarial framework still used today, including 75 year projections and detailed analyses of demographic and economic pressures.

Social Security's Resilience

Following the 1983 reforms, Social Security continued to demonstrate resilience during periods of economic stress and public concern about solvency. In 1993, Congress increased the share of benefits subject to income tax for higher income beneficiaries, directing the additional revenue to the trust funds. During the Great Recession, when unemployment rose sharply and millions lost private retirement wealth, Social Security benefits continued to be paid without interruption. The same was true during the COVID-19 pandemic, highlighting the stability and strength of the program even under severe economic strain.

Congress also safeguarded the trust funds during temporary payroll tax holidays in 2011 and 2012 by reimbursing the system from general revenues. In 2015, lawmakers rebalanced payroll tax allocations between the retirement and disability trust funds to address a temporary shortfall in Disability Insurance, while closing certain claiming strategies that had provided windfall payments to some higher income households. Recent inflation has produced unusually large cost-of-living adjustments, reinforcing the role of Social Security in protecting the purchasing power of beneficiaries (Social Security Administration, n.d.).

How Social Security Operates Today

Social Security is financed by a payroll tax of 12.4 percent on covered wages up to an annual cap, with employers and employees each paying half. Self-employed workers pay the full rate through the self-employment tax. Revenues flow into the Old-Age and Survivors Insurance and Disability Insurance trust funds, where they are invested in special issue United States Treasury securities that earn interest (Policy Basics, 2024). When annual benefit obligations exceed payroll tax revenue, the trust funds redeem these securities to cover the difference.

Benefits are calculated by wage indexing a worker's earnings history, determining their Average Indexed Monthly Earnings, applying a progressive benefit formula that replaces a larger share of lifetime earnings for lower wage workers, and adjusting the monthly amount based on the age at which the worker's claim benefits relative to the full retirement age. After entitlement, annual cost-of-living adjustments are made to ensure that benefits keep pace with inflation. Additional protections include spouse and survivor benefits and disability insurance for individuals whose impairments prevent substantial work.

Today, Social Security remains the largest and most dependable source of retirement income in the United States. It delivers benefits at low administrative cost while pooling

longevity, disability, and survivor risks across the entire workforce. The administrative costs have totaled one percent or less of combined cost from the trust funds since 1989 (Social Security Administration, n.d.). Although demographic change continues to create long-term financing challenges, the program's historical record shows that careful and targeted policy adjustments can, and will, preserve both solvency and adequacy without undermining the program's central role as the nation's primary social insurance system.

Solvency

Social Security's long-term financial outlook depends on a balance between the payroll tax revenue coming in and the scheduled benefits going out. According to the Congressional Budget Office, the program's two trust funds face growing pressure over the next several decades. As the population ages, and the ratio of workers to beneficiaries continues to fall, more pressure will be placed upon policymakers to take action. Fewer workers are supporting more retirees, and this demographic shift is the primary driver of the projected shortfalls (Congressional Budget Office, 2024).

The retirement segment of the program, funded through the Old-Age and Survivors Insurance Trust Fund, is projected to run deficits throughout the next decade. The CBO reports that if the current laws remain unchanged, the balance of this fund will be exhausted in the mid-2030s. After exhaustion, incoming revenue would be sufficient to pay only a portion of scheduled benefits, estimated at about 75-80% of benefits (Congressional Budget Office, 2024). Although the Disability Insurance Trust Fund is in comparatively better shape, the combined accounts still fall short of long-term sustainability because retirement benefits make up the largest share of program costs (Congressional Budget Office, 2024).

Rising benefit payments are not driven only by higher individual payouts but also by the increasing number of people entering retirement. Americans are living longer, and a large share of the Baby Boomer generation has already reached eligibility. At the same time, payroll tax revenue has not kept pace because the labor force is growing slower than in past decades. Without changes to taxes or benefits, this creates a funding gap that widens over time (Congressional Budget Office, 2024). The CBO notes that addressing solvency becomes more difficult the longer policymakers wait, since delayed reforms would require larger changes to restore long-term balance. Options include raising payroll tax rates, increasing or modifying the taxable earnings cap, adjusting benefits, or combining elements from multiple approaches (Congressional Budget Office, 2024). As discussed earlier, past reforms have taken the mixed approach.

Data and Methods

The following analysis uses microdata from the 2025 Current Population Survey Annual Social and Economic Supplement (CPS ASEC), accessed through IPUMS CPS. The CPS ASEC is the basis for the Census Bureau's official poverty statistics for calendar year 2024. Two parallel samples are constructed: one using the Official Poverty Measure (OPM) variables and one using the Supplemental Poverty Measure (SPM) variables.

For the OPM analysis, the IPUMS CPS ASEC file is restricted to survey year 2025 (income year 2024) and to the universe with valid official total family income and poverty thresholds. The official total family income measure and the corresponding official poverty cutoff are used to determine whether each person is poor under the standard OPM definition. Social Security income is identified at the person level and aggregated to the family level so that it aligns with the OPM family concept. Cases where Social Security income is not in universe

(meaning the survey respondent is not part of the population where the question applies), or is missing, are treated as having zero Social Security income.

For the SPM analysis, the IPUMS CPS ASEC SPM file is again restricted to survey year 2025. The SPM family unit and SPM resource and threshold variables provided by IPUMS are used. Because the SPM defines both resources and needs at the SPM family-unit level, Social Security income is aggregated to these units before being incorporated into the resource measure.

In both frameworks, the same counterfactual experiment is implemented. First, poverty status with Social Security is computed using the official resource measures (OPM family income or SPM total resources) and the corresponding poverty thresholds. Second, a counterfactual resource measure is constructed that subtracts Social Security income from the relevant family- or SPM-unit resources. Using the same poverty thresholds, poverty status is then recomputed without Social Security. The appropriate survey weights (CPS ASEC person weight for OPM and the SPM weight for SPM) are applied to obtain nationally representative counts of the population, the number of poor individuals with Social Security, and the number who would be poor in the absence of Social Security.

The effect of Social Security on poverty is summarized in two ways. The difference in the weighted number of poor individuals between the counterfactual scenario without Social Security and the baseline with Social Security represents the number of people kept out of poverty by Social Security. In addition, the corresponding poverty rates in each scenario are computed and the change in percentage points is reported. To visualize these differences, bar charts are produced that compare poverty rates and the number of poor individuals with and without Social Security under each poverty framework.

Results

Official Poverty Measure (OPM)

Under the OPM, the weighted CPS ASEC 2025 sample represents a total population of about 337.7 million people. With Social Security included in family income, approximately 35.9 million individuals are poor, corresponding to an OPM poverty rate of 10.6 percent. When Social Security is removed from family income and poverty status is recomputed, the number of poor individuals increases to about 59.2 million, and the poverty rate rises to 17.5 percent.

The difference between these scenarios indicates that Social Security keeps roughly 23.3 million people out of poverty under the OPM in 2024. Measured in rates, Social Security reduces the official poverty rate by about 6.9 percentage points (from 17.5 percent without Social Security to 10.6 percent with Social Security). These results are shown in Figure 1, "OPM Poverty Rate, Income Year 2024," which compares poverty rates with and without Social Security, and Figure 2, "OPM: Number of People in Poverty, 2024," which reports the corresponding counts of poor individuals in millions.

Figure 1

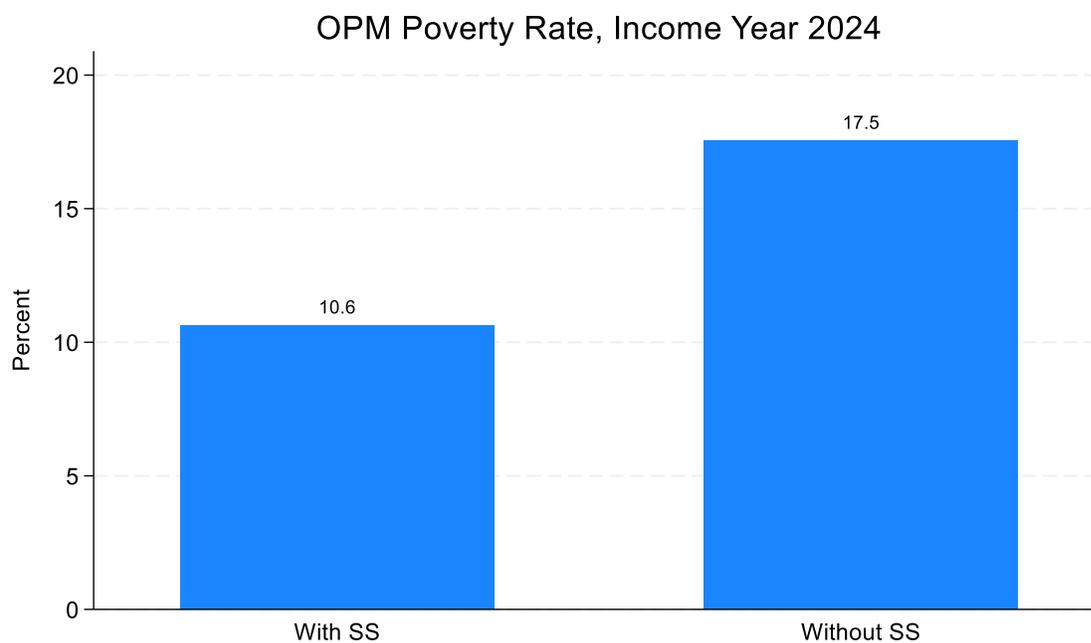
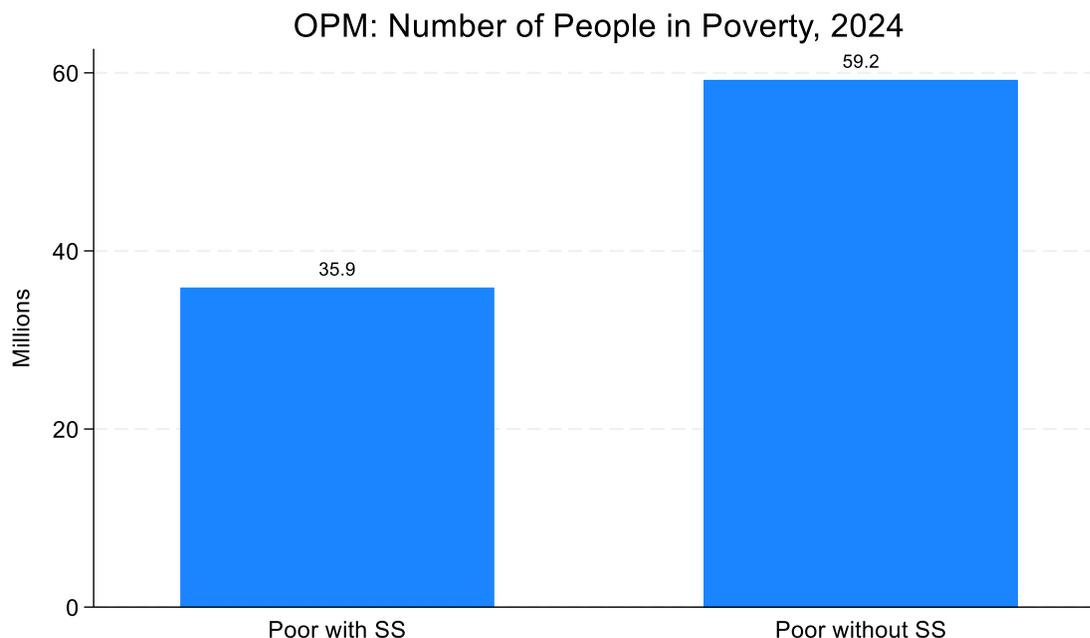


Figure 2***Supplemental Poverty Measure (SPM)***

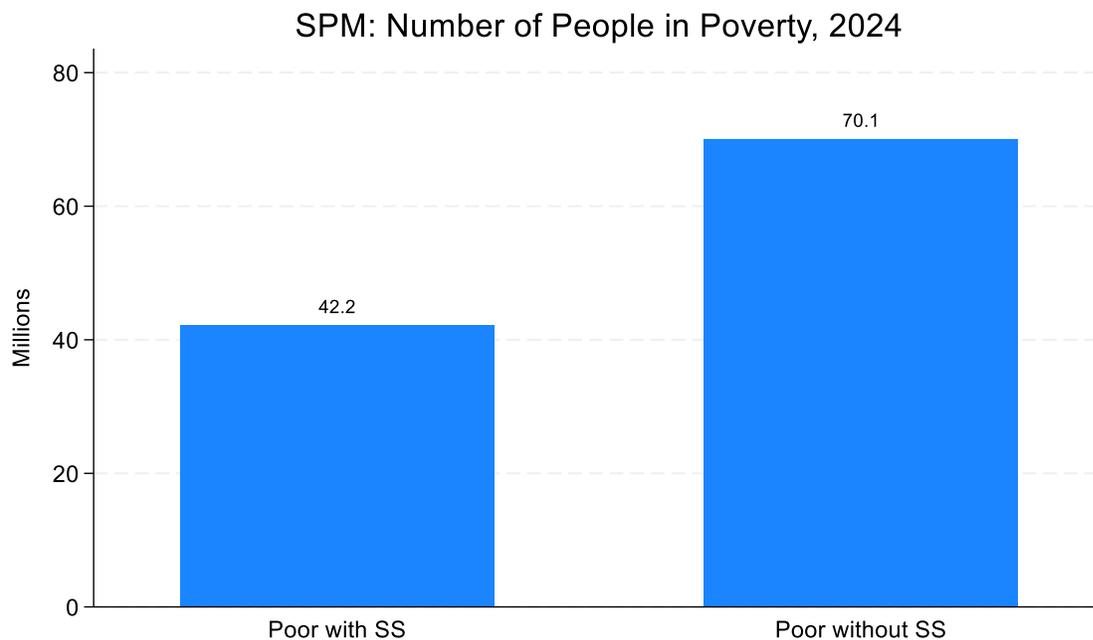
The SPM results show an even larger effect. In the SPM framework, the weighted sample represents a total population of about 326.7 million people. Using the SPM resource measure and thresholds, 42.2 million individuals are poor when Social Security is included, yielding an SPM poverty rate of 12.9 percent. When Social Security income is removed from resources, the number of poor individuals increases to roughly 70.1 million, and the poverty rate rises to 21.5 percent.

The effect of Social Security under the SPM is that it keeps about 27.9 million people out of poverty in 2024. In percentage points, Social Security reduces the SPM poverty rate by about 8.5 points (from 21.5 percent without Social Security to 12.9 percent in the observed data). Figure 3, "SPM Poverty Rate, Income Year 2024," presents the poverty rates with and without Social Security, while Figure 4, "SPM: Number of People in Poverty, 2024," reports the corresponding counts in millions.

Figure 3



Figure 4



Age Specific Effects of Social Security

The following tables reveal that the vast majority of Social Security’s poverty-reducing effect can be attributed to the elderly population (age 65+). Under both the SPM and the OPM frameworks, the rate of poverty without Social Security among older adults would soar, up to nearly half of that population under SPM, and more than a third under OPM. In contrast, the impact for children is modest and for working-age adults more moderate.

The age-specific results align with prior research. For example, a study by the National Bureau of Economic Research found that a \$1,000 increase in Social Security benefits is associated with an about 3 percentage-point reduction in the elderly poverty rate, and that benefit increases over time may explain nearly the entire 17-point decline in elderly poverty between 1967 and 2000 (Engelhardt & Gruber, 2004). Another report from the Center on Budget and Policy Priorities notes that “Social Security lifts more people above the poverty line than any other program,” and particularly emphasizes the older-adult segment (Romig, 2025).

Table 1

SPM: Poverty by Age Group, With vs Without Social Security (2024)

Age Range	Population (Millions)	Poor with SS (Millions)	Poor without SS (Millions)	Rate with SS (%)	Rate without SS (%)	Percent Change
0-17	68.8	9.1	10.4	13.3	15.1	1.8
18-64	195.9	23.8	30.3	12.1	15.5	3.3
65+	62.0	9.3	29.4	15.0	47.4	32.5

Table 2

OPM: Poverty by Age Group, With vs Without Social Security (2024)

Age Range	Population (Millions)	Poor with SS (Millions)	Poor without SS (Millions)	Rate with SS (%)	Rate without SS (%)	Percent Change
0-17	73.0	10.4	11.4	14.2	15.6	1.4
18-64	203.2	19.4	24.8	9.6	12.2	2.6
65+	61.5	6.1	23.0	9.9	37.4	27.5

These results reinforce the conclusion that Social Security acts as a critical anti-poverty program for older Americans. The estimated effects shown in Tables 1 and 2 for the 65+ age group highlight that without Social Security, elderly Americans would face dramatically higher rates of hardship, with poverty levels rising to several times their observed levels. Both the OPM and SPM frameworks make clear that removing Social Security pushes elderly poverty into ranges that are economically severe and not sustainable. Social Security is a program that operates not as a minor supplement to retirees' incomes, but as the backbone of many of their retirements.

Limitations

These estimates show how official poverty rates change when Social Security income is removed from reported household resources. This analysis did not account for how people or policies would respond if Social Security income was actually eliminated. In reality, some people may choose to work longer, rely more on family, or qualify for other government or state-level programs which would change results. This analysis also did not adjust tax liabilities or eligibility for other benefits when Social Security is removed, so the results reflect a simple income subtraction rather than a full simulation, which may be done by other agencies to capture

a more accurate estimate. Overall, the results above should be taken as a look at a possible outcome using the available data, and not as a prediction of an actual policy change.

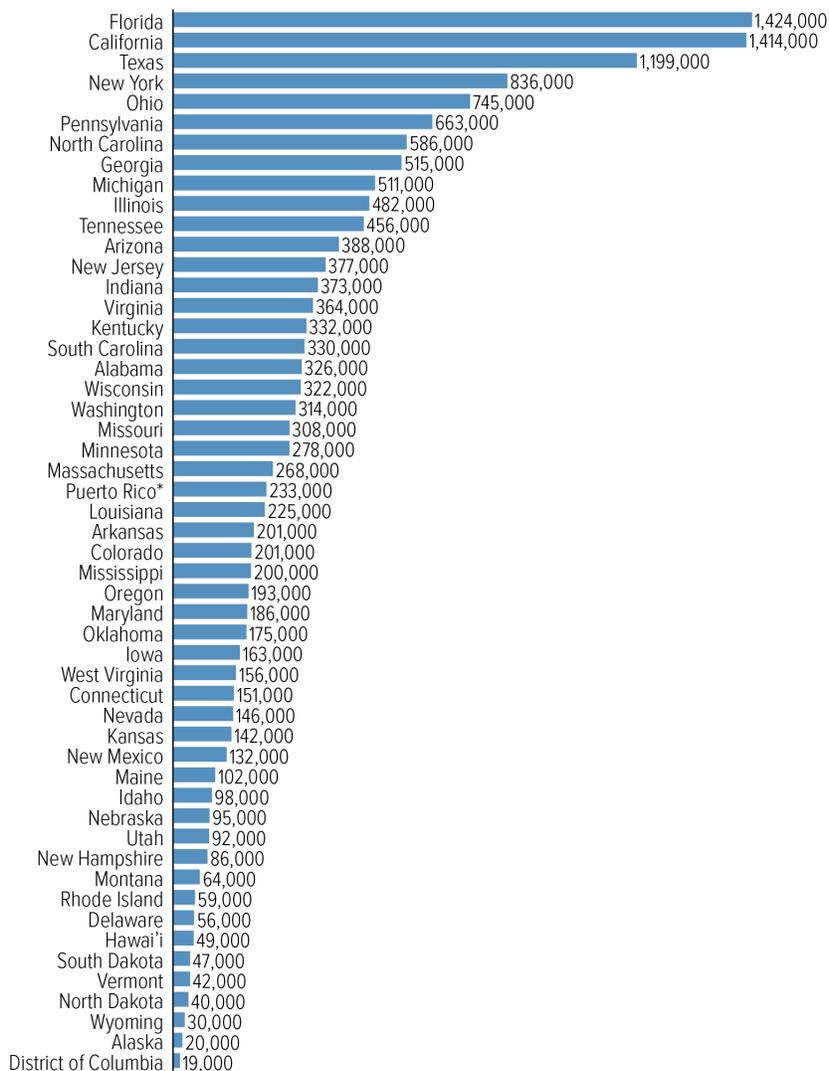
Poverty Effects by State

Social Security significantly reduces poverty across all states, although the size of its impact varies depending on population age structure, income levels, and regional economic conditions. States with larger older populations or lower average retirement incomes tend to see the strongest effects (Center on Budget and Policy Priorities, 2024). Additional research from the Economic Policy Institute shows that reliance on Social Security is especially concentrated in many Southern and Midwestern congressional districts. These areas often have lower household incomes and older populations, which make these areas particularly dependent on Social Security (Economic Policy Institute, 2024).

Smaller states show lower absolute numbers, but the program's effect is still meaningful. States such as Maine, Idaho, and Montana each have tens of thousands of seniors who would fall below the poverty line without Social Security. In every state listed in Figure 5, the program functions as the most significant source of poverty reduction for older adults. This pattern aligns with this paper's findings of Social Security's poverty reduction effects.

Figure 5

Adults aged 65 or older lifted above the poverty line by Social Security, 2021-2023



Note. Data from Social Security Lifts More People Above the Poverty Line Than Any Other Program, Center on Budget and Policy Priorities (2025).

Conclusion

Social Security remains one of the most important economic institutions in the United States. It provides dependable income in retirement and greatly limits poverty among older Americans. Created during the Great Depression, Social Security has proven its resilience, effectiveness, and importance through several economic downturns. The evidence in this paper indicates that Social Security serves as a primary source of economic security, especially for

retirees with limited pensions, low lifetime earnings, or little personal wealth. Its structure matters for that outcome. Benefits are wage indexed, progressive, and protected against inflation to ensure effectiveness and longevity. While this analysis does not model how households, employers, or other safety net programs would adjust under a real policy change, it still makes clear that Social Security substantially reduces hardship and protects living standards in old age. Future policy choices therefore need to focus on maintaining long-term solvency in ways that do not weaken the program's role in preventing poverty and stabilizing retirement income. The central challenge here is to balance fiscal sustainability with adequacy, so that the program continues to serve the purpose it has served for nearly a century.

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