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The Impact of Social Security Reform on Low-Income Workers

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Executive Summary

Because the poor are disproportionately dependent on Social Security for their retirement income, they will be among those most affected by any reform of the troubled retirement program. Traditional reforms, such as raising taxes or cutting benefits, will leave low-income workers worse off. However, allowing workers to save and invest a portion of their Social Security taxes in individual accounts may avoid or offset potential benefit cuts, without increasing taxes.

Equally important, individual accounts may provide an opportunity to address some of the other problems with the current Social Security system, in particular its impact on wealth accumulation, the intergenerational transfer of wealth, and the inequality of wealth in America.

Poor households currently save very little and therefore own almost no financial wealth at retirement. As a result, the distribution of bequeathable wealth among retirees in the United States is highly unequal. There is strong evidence that Social Security may be contributing to that inequality. In contrast, a system of individual accounts would allow workers to accumulate real and bequeathable wealth, leading ultimately to greater overall equality of wealth. Social Security privatization therefore becomes the truly progressive option for reform.

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There are relatively few options for restoring Social Security to solvency: we can raise taxes, cut benefits, or attempt to earn a higher rate of return through investment in real capital assets.

Introduction

It is now generally acknowledged that Social Security is facing severe financing problems. Under the Social Security Administration's intermediate economic and demographic assumptions, the system's annual outlays (benefits plus administrative costs) will begin exceeding tax revenues after 2016. Official projections indicate that meeting future Social Security funding shortfalls by issuing debt would require additional debt accumulation of $47 trillion by 2075.[1]

Financial problems make changes in Social Security inevitable. However, it is important to realize that any change will have a significant impact on the lives of millions of Americans. That is especially true for low-income Americans, who disproportionately depend on Social Security for their retirement income. The poorest 20 percent of the elderly, for example, depend on Social Security for 81 percent of their retirement income, while Social Security provides only 20 percent of retirement income for the wealthiest fifth of retirees.[2]

There are relatively few options for restoring Social Security to solvency: we can raise taxes, cut benefits, or attempt to earn a higher rate of return through investment in real capital assets. Cuts in benefits or tax hikes would have to be quite severe. The President's Commission to Strengthen Social Security estimates that it would take benefit reductions of 26 percent or tax increases of 37 percent to keep the program in actuarial balance over the next 75 years.[3]

However, allowing workers to save and invest a portion of their Social Security taxes in individual accounts may avoid or offset potential benefit cuts, without increasing taxes. Equally important, individual accounts may provide an opportunity to address some of the other problems with the current Social Security system, in particular its impact on wealth accumulation, the intergenerational transfer of wealth, and wealth inequality in America.

Many less-well-off households—particularly minority households and those with low education and earnings—currently save very little and therefore own almost no financial wealth at retirement. As a result, the distribution of bequeathable wealth among retirees in the United States is highly unequal. There is strong evidence that Social Security, which forces the poor to annuitize a large fraction of what would otherwise be their retirement savings, may be contributing to this inequality. In contrast, a system of individual accounts would allow workers to accumulate real and bequeathable wealth and would lead ultimately to greater equality of wealth.

Social Security privatization therefore becomes the truly progressive option for reform—one that is most likely to benefit the poor.

Tax Hikes, Benefit Cuts, and the Poor

In the absence of the higher returns earned through investing Social Security funds in private capital assets, tax increases, benefit cuts, or some combination of the two will be required to restore the system to solvency. Given the vulnerability of low-income workers and their disproportionate reliance on Social Security for retirement income, it is important to look at how such actions would affect this group.

One simple way to measure the impact of any Social Security reform proposal is to examine how that proposal affects lifetime net tax rates (the excess of present value of Old-Age and Survivors Insurance payroll taxes over the present value of OASI benefits, measured as a percentage of the present value of lifetime earnings).[4]

Table 1 uses this method to show the impact of various Social Security reforms on the lowest, middle, and highest quintiles of income earners (average lifetime income) sorted by date of birth. The first four columns in Table 1 show section-specific lifetime net tax rates under "current rules" and alternative policy reforms that do not involve an option for private investment.[5] The last four columns show policy-specific increases in lifetime net tax rates relative to those under current rules.

It is evident that the poorest lifetime earners suffer disproportionately large increases in their lifetime net tax rates under the majority of proposed reforms. For example, a direct tax hike hits the poorest and middle lifetime earners the hardest. A direct cut in benefits increases the lifetime net tax rates of the poorest old and middle-aged portions of the population by more than does a direct tax hike. Increases in lifetime net tax rates as the result of a direct benefit cut are larger for the poorest than for middle- and upper-income households.

Policies 3 through 7 and policy 10 impose indirect benefit cuts by manipulating different aspects of

Table 1
The Impact of Potential OASI Reforms on Lifetime Net Tax Rates (discount rate = 5%)

	Policy	Lifetime Net Tax Rate by Quintile of Lifetime Earnings				Increase from Current Rules by Quintile of Lifetime Earnings			
		Lowest	Middle	Highest	All	Lowest	Middle	Highest	All
					Birth Cohort 1945–49				
0	Current rules	-4.2	6.1	5.0	5.3				
1	38% tax hike beginning in year 2000	-3.9	6.4	5.3	5.7	0.3	0.3	0.3	0.4
2	25% benefit cut beginning in year 2000	-.2	7.1	5.4	6.0	4.0	1.0	0.4	0.7
3	Accelerated increase in normal retirement age	-1.7	6.9	5.4	5.9	2.5	0.8	0.4	0.6
4	CPI indexing of covered earnings	-3.0	6.4	5.1	5.6	1.2	0.3	0.1	0.3
5	Indexing benefits by CPI minus 1%	-2.5	6.5	5.1	5.6	1.7	0.4	0.1	0.3
6	Stabilize real per capita benefits	-2.3	6.6	5.2	5.7	1.9	0.5	0.2	0.4
7	Freeze bend points in real terms	-3.8	6.3	5.0	5.4	0.4	0.2	0.0	0.1
8	Eliminate earnings ceiling	-4.4	6.1	5.3	5.5	-0.2	0.0	0.3	0.2
9	Eliminate earnings ceiling w/o benefit change	-4.2	6.1	5.4	5.6	0.0	0.0	0.4	0.3
10	Increase computation years from 35 to 40	-3.5	6.3	5.0	5.4	0.7	0.2	0.0	0.1
					Birth Cohort 1970–74				
0	Current rules	-3.4	5.7	5.3	5.4				
1	38% tax hike beginning in year 2000	-1.1	8.4	7.1	7.6	2.3	2.7	1.8	2.2
2	25% benefit cut beginning in year 2000	.0	6.9	5.7	6.1	3.4	1.2	0.4	0.7
3	Accelerated increase in NRA	-1.6	6.5	5.6	5.9	1.8	0.8	0.3	0.5
4	CPI indexing of covered earnings	-2.2	6.1	5.4	5.6	1.2	0.4	0.1	0.2
5	Indexing benefits by CPI minus 1%	-1.9	6.2	5.4	5.7	1.5	0.5	0.1	0.3
6	Stabilize real per capita benefits	1.9	7.5	5.9	6.5	5.3	1.8	0.6	1.1
7	Freeze bend points in real terms	-2.2	6.3	5.5	5.8	1.2	0.6	0.2	0.4
8	Eliminate earnings ceiling	-4.1	5.7	7.7	6.9	-0.7	0.0	2.4	1.5
9	Eliminate earnings ceiling w/o benefit change	-3.4	5.7	8.2	7.3	0.0	0.0	2.9	1.9
10	Increase computation years from 35 to 40	-2.6	5.9	5.3	5.5	0.8	0.2	0.0	0.1
					Birth Cohort 1995–2000				
0	Current rules	-2.9	5.5	5.4	5.4				
1	38% tax hike beginning in year 2000	.9	9.3	8.0	8.4	3.8	3.8	2.6	3.0
2	25% benefit cut beginning in year 2000	.4	6.7	5.8	6.1	3.3	1.2	0.4	0.7
3	Accelerated increase in NRA	-1.3	6.2	5.6	5.8	1.6	0.7	0.2	0.4
4	CPI indexing of covered earnings	-1.7	5.9	5.5	5.6	1.2	0.4	0.1	0.2
5	Indexing benefits by CPI minus 1%	-1.5	5.9	5.5	5.6	1.4	0.4	0.1	0.2
6	Stabilize real per capita benefits	6.8	9.0	6.6	7.5	9.7	3.5	1.2	2.1
7	Freeze bend points in real terms	-.9	6.4	5.7	5.9	2.0	0.9	0.3	0.5
8	Eliminate earnings ceiling	-3.3	5.5	8.2	7.1	-0.4	0.0	2.8	1.7
9	Eliminate earnings ceiling w/o benefit change	-2.9	5.5	8.7	7.5	0.0	0.0	3.3	2.1
10	Increase computation years from 35 to 40	-2.2	5.5	5.4	5.5	0.7	0.2	0.0	0.1

Source: Author's calculations based on Jagadeesh Gokhale and Laurence J. Kotlikoff, "Social Security's Treatment of Postwar Americans: How Bad Can It Get?" in *The Distributional Aspects of Social Security and Social Security Reform*, ed. Martin Feldstein and Jeffrey Leibman (Chicago: University of Chicago Press, 2002).

Social Security's benefit formula.[6] In each case, the poorest lifetime earners suffer the largest increase in lifetime net tax rates. The poorest earners face the same or lower lifetime net tax rates only under policies 8 and 9, both of which are exclusively aimed at increasing the burden on high lifetime earners. Moreover, the conclusion that the poorest lifetime earners suffer the largest increases in lifetime net tax rates under most traditional Social Security reforms remains unchanged under alternative assumptions about the present value of future Social Security payments.

This study does not address the impact of individual accounts. But such accounts would benefit the poor in two ways. First, to the degree that privatization reduced Social Security's long-term deficit, it would reduce the need to cut benefits or increase tax rates. Second, the accumulation in individual accounts would offset any reduction in government-provided benefits that Congress deemed necessary to balance the system.[7]

Contrary to conventional wisdom, Social Security may be contributing to the high level of inequality in bequeathable wealth.

Bequeathable Wealth

Social Security reform may also affect the poor in a less visible, but perhaps even more important, way.

Many less-well-off households—particularly minority households and those with low education and earnings—save very little and own almost no financial wealth at retirement. Low saving by low lifetime earners renders the distribution of bequeathable wealth among retirees in the United States highly unequal. Calculations based on the Federal Reserve's "Survey of Consumer Finances" show that of all the wealth (net worth) owned by married households around the time of retirement (age 60–69), one-third is owned by the richest 1 percent of households. About one-half of wealth is owned by the top 5 percent of households, and nearly two-thirds is owned by the top 10 percent of households.[8] Contrary to conventional wisdom, Social Security may be contributing to this high level of inequality.

Wealth in the form of an entitlement to future Social Security and Medicare benefits—annuitized wealth—helps finance retirement consumption. However, it is widely appreciated that such annuity income alone is not enough. Access to wealth in assets that are freely transferable (stocks and bonds in an individual account) provides additional options for spending during retirement. For example, financing a child's college education, helping a child with a down payment on a house, entering a nursing home, and leaving a bequest are options that remain open with bequeathable wealth but are foreclosed when most of one's "wealth" is a monthly check received from the government. Hence, the fact that the United States exhibits a sizable degree of inequality in bequeathable wealth at retirement is a matter of some concern.

Another issue that is not as evident and is hardly ever discussed (probably because we lack appropriate data) is that, because of the disparity in bequeathable wealth among retirees, economic (and social) mobility among families across generations is not as great as we might desire. Again, the reason for this may be Social Security.

Social Security and Bequeathable Wealth

According to a recent simulation study, Social Security is an important contributor to inequality in bequeathable wealth in the United States.[9] Moreover, because Social Security contributes significantly to inequality in the size of inheritances, it induces greater persistence in inequality across household "dynasties."

The study assumes that households seek to maintain a "smooth" affordable consumption standard based on their expected lifetime earnings level. Thus, they save when income is high in order to maintain living standards when it is low—as in retirement. Because Social Security imposes a payroll tax when people are working and provides benefits during retirement, it reduces or eliminates low lifetime earners' incentives to arrive at retirement with significant personal savings. This effect is more pronounced for low earners because Social Security benefits finance a larger fraction of their target postretirement consumption. Low bequeathable wealth accumulation through retirement, of course, implies that low-wage workers pass on little to their offspring at death.

In contrast, high earners—who receive only a very small fraction of their retirement "wealth" from Social Security—accumulate considerable personal savings through retirement (again, to finance their higher target

postretirement consumption). Therefore, they arrive at retirement with a stock of bequeathable wealth that is almost as great as it would be in the absence of Social Security. This implies that the children of the rich continue to receive large inheritances upon their parents' deaths.

Because it generates an asymmetric impact on retirement saving by low and high lifetime earners, Social Security may be reducing or eliminating the inheritances of children in poor households but not of those in rich households. In turn, this may reinforce the chance that the children of the poor, in contrast to those of the rich, themselves arrive at retirement with low levels of bequeathable wealth.

This suggests that by making the distribution of bequests more unequal, Social Security may increase the persistence of inequality in bequeathable wealth in poorer households. Showing that this is true for an economy is difficult, if not impossible, because the required data on bequests and inheritances are unavailable and, indeed, may be impossible to collect. However, the aforementioned dynamic simulation calibrated to the U.S. economy can help to provide ballpark estimates of Social Security's influence on inequality in bequeathable wealth at retirement and on the transmission of that inequality across generations.[10]

Results from a Simulation Study

Using this relatively simply stylized life-cycle simulation model, one can construct simple experiments to answer questions about wealth inequality.[11] Calibrating the simulation under current Social Security tax and benefit benchmarks yields a Gini coefficient of 0.674 for the distribution of bequeathable wealth at retirement.[12] This is quite close to the observed value of 0.73 (as calculated from the "Survey of Consumer Finances"). Moreover, the simulated distribution of bequeathable wealth at retirement closely approximates the concentration of wealth at the upper tail of the observed distribution. In the simulated distribution, of all bequeathable wealth held by households that are about to retire, 32.8 percent is held by the top 1 percent of households, 49.4 percent is held by the top 5 percent of households, and 58.5 percent is held by the top 10 percent of households.

An obvious question to pose is whether there would be less or greater inequality in bequeathable wealth among those at retirement age in the absence of Social Security.[13] Eliminating Social Security in the simulation model is equivalent to privatizing it: Without Social Security, all households save in their own personal accounts for financing their target retirement consumption. When Social Security is eliminated from the simulation, the model's Gini value falls to 0.608. This suggests that Social Security causes greater inequality in bequeathable wealth among retirees.

The Transmission of Inequality across Generations

The simulation can be used to perform another interesting experiment—to address questions about the intergenerational transmission of wealth inequality via bequests. The question posed here is, Given that some households in a given generation have low bequeathable wealth at retirement, how likely are their children to retire with similarly low bequeathable wealth? This question about intergenerational wealth mobility is just as important as the previous one about wealth inequality. Low upward wealth mobility—which means that those who are poor today have little chance (or their children have little chance) of emerging wealthy tomorrow—is obviously undesirable. It detracts from the ideal of equality of opportunity and provokes calls for public intervention on behalf of those stuck in poverty.

The results on the influence of Social Security on intergenerational wealth mobility are striking. In Tables 2 and 3, rows show parental wealth positions at retirement and columns show children's wealth positions when they retire.[14] They show the probability (as a percentage) that the child will appear in any particular wealth quintile given the parents' position in the bequeathable wealth distribution. Table 2 shows the probabilities under current Social Security's benchmarks. For example, 40 percent of the children of those who hold less than $99,000 in bequeathable wealth at retirement will also retire with $99,000 or less. On the other hand, those children have only a 5 percent chance of accumulating more than $455,000 by retirement. In contrast, children of parents retiring with more than $455,000 have an almost 50 percent chance of themselves retiring with more than $455,000. The probability that the children of rich retirees will accumu-

Social Security may be reducing or eliminating the inheritances of children in poor households.

Table 2
Intergenerational Mobility in Bequeathable Wealth under Current Social Security

Parent Wealth at Retirement ($ thousands)	Child Wealth at Retirement ($ thousands)				
	0–99	99–159	159–245	245–455	455–117,576
0–99	40.0	27.3	17.8	10.2	4.7
99–159	24.2	24.4	22.1	18.1	11.3
159–245	15.4	21.0	22.8	22.7	18.1
245–455	8.1	15.2	22.6	27.8	26.3
455–117,576	3.5	7.0	14.4	28.5	46.6

Upward intergenerational wealth mobility is quite low under the current Social Security system.

late less than $99,000 by retirement is less than 4 percent. These results suggest that upward intergenerational wealth mobility is quite low under the current Social Security system and that lack of bequeathable wealth is likely to be persistent among some household dynasties.

Table 3 shows the same probabilities without Social Security. Table 3's wealth cutoffs are the same as those of Table 2. When there is no Social Security (or, alternatively, if Social Security were privatized) children of parents in the poorest wealth category at retirement have only a 16 percent chance of retiring as members of the poorest group of their generation—much lower than the 40 percent chance in Table 2. As might be expected, the likelihood that those children will be in the richer categories at retirement increases significantly. For example, it more than doubles to 10.8 percent for the highest wealth category. The offspring of the rich, of course, have a much higher chance of themselves retiring rich and an even lower chance of retiring poor in the absence of Social Security.

One caveat is worth mentioning: reforming Social Security in the direction of setting up personal accounts may not improve intergenerational wealth mobility if households purchase annuities in the same amounts that Social Security provides today. However, given that owning bequeathable wealth enables households to improve the configuration of spending during retirement, and given that Social

Table 3
Intergenerational Mobility in Bequeathable Wealth under Privatized Social Security

Parent Wealth at Retirement ($ thousands)	Child Wealth at Retirement ($ thousands)				
	0–99	99–159	159–245	245–455	455–117,576
0–99	16.3	20.3	24.2	28.4	10.8
99–159	9.1	14.6	22.3	33.5	20.5
159–245	6.4	11.3	18.4	33.0	31.0
245–455	3.8	7.2	13.4	30.0	45.6
455–117,576	0.9	2.1	5.2	18.3	73.5

Security forcibly annuitizes a greater fraction of low earners' retirement resources, households with low earnings are likely to prefer a lower degree of annuitization under a reformed system. Hence, the simulation results should be taken as revealing the direction but not necessarily the magnitude of the potential improvement in wealth mobility across generations.

Conclusion

The results discussed above suggest that, in the absence of investment in private capital assets, we will have no choice but to pursue a Social Security reform that continues to disadvantage the poor and their offspring. Owning wealth in bequeathable form during retirement improves retirees' spending choices. However, by forcing the annuitization of a disproportionate fraction of low earners' retirement resources, Social Security increases inequality of bequeathable wealth within each generation. This occurs because Social Security reduces the ability and the incentive of low earners to accumulate personal savings for retirement. In addition, greater inequality of retiree wealth due to meager wealth accumulation by low earners prevents their children from receiving sizable inheritances. This means that such children have a greater likelihood of themselves retiring with low bequeathable wealth. This process implies a persistent social and economic schism between household dynasties that are trapped in poverty and other dynasties that continue to enjoy wealthy lifestyles.

In contrast, an individual account Social Security system would repair the current high degree of wealth inequality and low wealth mobility across households, moving America closer to the ideal of equality of opportunity—at least from an intergenerational perspective. Privatizing Social Security, therefore, becomes the truly progressive option for reform. Lawmakers who are concerned about the interest of the poor should be among the first to embrace individual accounts.

Notes

1. See *2001 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds* (Washington: Government Printing Office, March 19, 2001); and *Interim Report of the President's Commission to Strengthen Social Security* (Washington: Government Printing Office, July 2001).

2. Neil Gilbert and Neung-Hoo Park, "Privatization, Provision, and Targeting: Trends and Policy Implications for Social Security in the United States," *International Social Security Review* 49 (January 1996): 22.

3. *Interim Report of the President's Commission*, p. 18.

4. Jagadeesh Gokhale and Laurence J. Kotlikoff, "Social Security's Treatment of Postwar Americans: How Bad Can It Get?" in *The Distributional Aspects of Social Security and Social Security Reform*, ed. Martin Feldstein and Jeffrey Liebman (Chicago: University of Chicago Press, 2002).

5. The alternatives considered are based on popularly suggested reform proposals, and all improve Social Security's financial position. However, none except the first two restores the system to full, long-term solvency.

6. Policy 3 accelerates the scheduled increases in Social Security's normal retirement age; policy 4 uses the consumer price index (CPI) rather than the average annual wage series to index covered earnings when calculating the primary insurance amount (PIA); policy 5 increases retiree benefits by CPI minus 1 percent; policy 6 reduces future PIA amounts by productivity growth, preventing benefits from rising in real terms in the future; policy 7 grows future bend points in the PIA calculation according to the CPI rather than the nominal wage index; policy 8 eliminates current and future ceilings on taxable income without altering the method of calculating benefits; policy 9 is the same as policy 8 except that it eliminates the resulting addition to future benefits; and policy 10 increases the number of computation years from 35 to 40.

7. David Koitz, Geoffrey Kollmann, and Dawn Nuschler, "Social Security: What Happens to Future Benefit Levels under Various Reform Options," Congressional Research Service, August 20, 2001.

8. These calculations are reported in Jagadeesh Gokhale et al., "Simulating the Transmission of Inequality via Bequests," *Journal of Public Economics* 79 (2001): 93–128.

9. Other contributing factors are skill (earning) differences, and assortative marriage by skills. Ibid.

10. The model simulates an 88-period, overlapping-generations economy, with each generation consisting of 2,000 married households with demographic and economic characteristics calibrated to the U.S. population of married households. The factors studied in this model are the process of involuntary bequests and inheritance, fertility differences, skill (earnings) differences, partial marital sorting by skill levels, partial inheritance of skills, rate of return heterogeniety, progressive income taxation, and Social Security.

11. The estimates reported here should be viewed with caution as they are based on a stylized life-cycle simulation model. First, life-cycle behavior may not be an accurate representation of individual behavior, and, second, for

An individual account Social Security system would repair the current high degree of wealth inequality and low wealth mobility across households.

tractability, the model abstracts from a number of features of the real-world U.S. economy—for example, all households are assumed to be married, fertility among all households is always positive, and the observed negative correlation of mortality with skills and wealth is ignored.

12. A Gini coefficient is a measure of dispersion within a group of values, calculated as the average difference between every pair of values divided by two times the average of the sample. The larger the coefficient, the higher the degree of dispersion.

13. Focus is maintained on the just-retired population for two reasons. First, all potential inheritances have generally been received by the time one retires and uncertainty about future receipts is negligibly small. Hence, measuring bequeathable wealth inequality among the just-retired fully takes into account the influence of past inheritances. Second, it is the bequeathable wealth of the just-retired that determines the future inheritances of their offspring. As suggested later in the text, greater inequality in this wealth implies greater persistence of inequality across generations.

14. In the simulated economy, all uncertainty about potential inheritances is fully resolved by the age of retirement—66. The wealth ranges specified in Tables 2 and 3 are the result of benchmarking the simulation's aggregate wage flow to that of the U.S. economy in 1995.