



## The Distributional Consequences of a “No-Action” Scenario

No. 2004-01  
February 2004

*Under the Social Security program, benefits are paid to retired workers, survivors, and disabled persons out of two trust funds—the Old-Age and Survivors Insurance and the Disability Insurance (OASDI) Trust Funds. In their 2001 report, the Social Security Trustees projected that the combined OASDI trust funds would be exhausted in 2038. Because the trust funds are used to pay benefits, retirement benefits would have to be reduced slightly in 2038 and more drastically in 2039.*

*If no action were taken to strengthen Social Security, the benefit reductions necessitated by trust fund exhaustion would double the poverty rate of Social Security beneficiaries aged 64 to 78 in 2039. In addition, younger retirees would experience a greater reduction in lifetime benefits than older retirees because they would spend a greater share of their retirement in the post-insolvency period.*

Although there is frequent discussion about the possibility that the Social Security trust funds will eventually be exhausted, little research has been done on the potential consequences of insolvency on retirement benefits and poverty. The following analysis is based on the assumptions underlying the 2001 Report of the Social Security Trustees, which projected that the combined Old-Age and Survivors Insurance and Disability Insurance (OASDI) Trust Funds would be exhausted in 2038. Since the trust funds allow the Social Security Administration to pay benefits when program costs exceed tax revenues, benefits would have to be cut once the trust funds were exhausted. Therefore, Social Security would be able to pay only 73 percent of scheduled benefits in 2039, with further reductions relative to scheduled benefits in future years (see Box 1 on page 4).<sup>1</sup> This analysis focuses on the effects of the reductions on retirement benefits, but the reductions would apply equally to all retired, survivor, and disabled beneficiaries. The results would be similar under the assumptions of the 2003 Trustees Report, although the projected date of exhaustion of the combined trust funds would be 2042.

If no action were taken to strengthen Social Security, the benefit reductions caused by insolvency would double the poverty rate of beneficiaries who were between the ages of 62 and 76 at the time insolvency took place. All beneficiaries would have their scheduled benefits cut by 27 percent in 2039.

However:

- The lowest income quintile would experience the greatest drop in their *total* retirement income because they have fewer non-Social Security resources to call upon.
- Younger retirees would experience a greater reduction in lifetime benefits than older retirees because they would spend a greater share of their retirement in the post-insolvency period.
- Women would experience a greater reduction in lifetime benefits than men because women generally start receiving benefits earlier and live longer and are therefore likely to collect benefits for a greater number of years past the trust funds' exhaustion date.

### **Methodology**

The estimates of the effect on poverty come from Modeling Income in the Near Term (MINT), a computer model that uses matched survey and administrative data to project demographic changes, retirement income, and Social Security benefits.<sup>2</sup> MINT is useful because it illustrates the change in poverty rates and total income under the no-action scenario for specific years.

The MINT model projects the earnings of current workers to 2022, incorporating projected changes in workforce participation, longevity, and a number of other factors. For this analysis, the individual earnings records in the MINT database are shifted

forward 16 years to replicate the experiences of individuals at the time of projected trust fund exhaustion. While this method fails to incorporate trends taking place between 2022 and 2038 (with the exception of income growing at the rate of average wages), it should nevertheless provide a reasonable representation of the distributional effects of a trust fund insolvency scenario if, for example, there is no progress in closing the income gaps between men and women or whites and nonwhites over the next 16 years. While the poverty threshold and SSI benefits increase at the rate of price growth during this period, other income sources generally increase with wage growth, including Social Security benefits.

The estimates of average lifetime benefits are from the Social Security and Accounts Simulator (SSASIM) model, which uses stylized individuals to examine the effects of Social Security policy on persons with various demographic and socioeconomic characteristics. SSASIM is useful because it illustrates the impact of the no-action scenario on average annual lifetime benefits, but its results should not be generalized to describe the experience of the entire population subgroup.

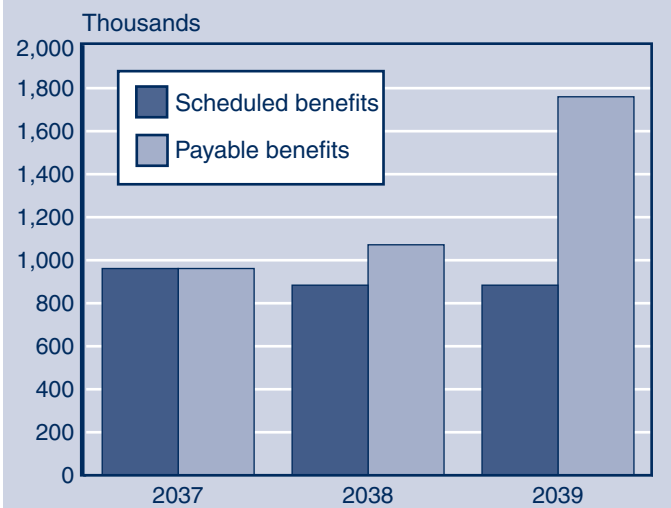
### Poverty Rate Would Double

In 2039, the year after the trust funds are projected to be exhausted, the poverty rate would double from 2 percent to 4 percent for beneficiaries who were between the ages of 64 and 78 in that year.<sup>3</sup> The benefit reductions caused by Social Security’s insolvency would force 875,000 additional beneficiaries into poverty, resulting in

a total of 1.76 million poor beneficiaries between the ages of 64 and 78 in 2039 (Chart 1).<sup>4</sup> Moreover, women and minorities would be overrepresented among the beneficiaries forced into poverty by the benefit cut. Of the 875,000 additional beneficiaries in poverty in 2039, 42 percent would be black or Hispanic and 62 percent would be women (Table 1).

Beneficiaries in the lowest income quintile would face a 19.8 percent reduction in total income, compared with a 5.8 percent reduction for those in the highest quintile and an average reduction for all beneficiaries of 13.9 percent.<sup>5</sup> The reduction is larger for lower-income beneficiaries because they have fewer non-Social

**Chart 1.**  
Beneficiaries aged 62 to 76 in 2037 in poverty in 2037 to 2039



**Table 1.**  
Effect of the no-action scenario on poverty rates for beneficiaries aged 64 to 78 in 2039 (numbers in thousands)

Characteristic	Total	Scheduled benefits		Payable benefits		Increase in poverty	
		Number in poverty	Percentage of total	Number in poverty	Percentage of total	Number	Percentage of total
All beneficiaries aged 64 to 78	43,295	884	2.0	1,760	4.0	875	2.0
<b>By sex</b>							
Men	19,888	309	1.5	644	3.2	335	1.7
Women	23,407	575	2.4	1,116	4.6	541	2.2
<b>By race and ethnicity</b>							
White	33,721	431	1.3	908	2.6	477	1.4
Black	4,139	249	6.1	471	11.5	222	5.4
Hispanic	3,602	166	4.5	314	8.6	149	4.1
Asian	1,534	23	1.5	39	2.5	16	1.0
Native American	298	16	5.2	27	9.0	12	3.8

SOURCE: Social Security Administration estimates based on the Modeling Income in the Near Term (MINT) model.

NOTE: Rounding may cause slight discrepancies in sums and differences.

Security sources of retirement income, such as personal savings and employer pensions, and therefore depend on Social Security for a greater percentage of their total income.

Note that future poverty rates appear low relative to today's poverty rate of 10.2 percent,<sup>6</sup> even after Social Security's insolvency forces reductions in benefits. The reason is that the income levels used in measuring the poverty rate are increased annually at the rate of inflation, while average wages are projected to grow roughly 1 percent faster than inflation. Over time, the poverty rate should fall as a result of this wage/inflation differential. What is relevant for this analysis is not the absolute level of poverty among Social Security beneficiaries but the increase in poverty caused by the program's insolvency.

### ***Younger Retirees Would Have Larger Reductions in Lifetime Benefits***

In general, younger workers would face larger benefit reductions because they would spend a greater portion

of their retirement past the date of the trust funds' exhaustion. Average lifetime benefits would gradually decrease for successive cohorts of beneficiaries (Table 2). Typical members of the 1950 birth cohort would receive full scheduled benefits throughout their lifetimes, though longer-lived members of that birth cohort could expect to survive beyond the trust fund exhaustion date and thus receive reduced benefits. By contrast, the cohort born in 1980 would begin collecting retirement benefits after the projected date of trust fund exhaustion, and thus most individuals could expect to receive significantly reduced benefits over their lifetimes.

For example, a never-married male college graduate born in 1960 could expect a 4 percent reduction in lifetime benefits, relative to the current benefit schedule. Reductions for that same individual would be 18 percent if he was born in 1970 and 28 percent if he was born in 1980. Similarly, a never-married female college graduate born in 1960 could expect a 16 percent reduction in lifetime benefits, with increasing reductions if she was born later. In sum, younger cohorts would experience

**Table 2.**  
Effect of no-action scenario on average lifetime benefits of stylized individuals, by year of birth (in percent)

Education and marital status	1950	1960	1970	1980
<b>Men</b>				
High school dropout				
Never married	Deceased	Deceased	-22.27	-27.59
Married, one earner	Deceased	Deceased	-19.17	-27.64
Married, two earners	Deceased	Deceased	-22.34	-27.58
High school graduate				
Never married	Deceased	-4.36	-23.63	-28.05
Married, one earner	Deceased	-5.86	-23.89	-28.20
Married, two earners	Deceased	-4.42	-17.91	-27.85
College graduate				
Never married	Deceased	-4.37	-17.92	-27.91
Married, one earner	Deceased	-8.37	-24.35	-28.48
Married, two earners	Deceased	-7.22	-24.12	-28.36
<b>Women</b>				
High school dropout				
Never married	Deceased	-8.19	-19.71	-28.34
Married, one earner	-0.36	-15.11	-23.49	-29.25
Married, two earners	Deceased	-10.92	-21.28	-28.60
High school graduate				
Never married	-0.35	-12.55	-25.31	-29.05
Married, one earner	-2.16	-15.49	-24.41	-29.44
Married, two earners	-1.48	-13.52	-25.57	-29.23
College graduate				
Never married	-6.04	-15.75	-26.34	-29.74
Married, one earner	-3.81	-15.44	-24.34	-29.49
Married, two earners	-4.10	-15.47	-26.12	-29.60

SOURCE: Social Security Administration estimates based on the Social Security and Accounts Simulator (SSASIM) model.

successively larger reductions in average lifetime benefits than their predecessors. However, the rate of reduction for younger cohorts would gradually be reduced as workers retired in the post-insolvency period. Reductions in lifetime benefits would continue indefinitely for succeeding cohorts of retirees, though at a slower rate than for the older cohorts illustrated above.

## Policy Implications

The Social Security trust funds currently collect more money from payroll taxes than they pay out in benefits. If no action is taken, however, that situation will reverse itself soon after the baby-boom generation begins to retire.

If no action is taken and benefits are reduced on a proportionate basis when the trust funds become exhausted, total income of those at the lowest economic levels will be affected the most, significantly increasing the numbers of individuals in poverty and eligible for Supplemental Security Income or other means-tested benefits.

### Box 1. Impact on Real Benefit Levels

While trust fund insolvency would lead to large percentage reductions in scheduled benefits, real benefit levels for average retirees would remain as high as or higher than benefits paid to average retirees today. Social Security pays benefits designed to replace a given percentage of an individual's pre-retirement wages. While retirees would receive a lower "replacement rate" following trust fund insolvency than do current retirees, these individuals would have substantially higher pre-retirement wages as well. For instance, a medium-wage worker retiring today after 40 years of work would receive \$1,147 a month while a medium-wage worker retiring in 2045 would be scheduled to receive \$1,622 a month (in 2003 dollars). Even under the no-action scenario, the worker in 2045 would receive a slightly higher benefit than today's worker, \$1,184 a month, although that would be a 27 percent cut from the promised benefit amount. Thus, while trust fund insolvency would reduce Social Security's role in replacing wages lost because of retirement, it might not reduce the real purchasing power of benefits provided by Social Security relative to the benefits provided to today's retirees.

## Notes

<sup>1</sup> While there would be only enough revenue available to continue paying 73 percent of scheduled benefits, this analysis assumes a proportionate cut in benefits for all beneficiaries. However, this is only one possible option for allocating the benefit reduction among beneficiaries.

<sup>2</sup> The poverty threshold used for each person is based on their family size and elderly status and is indexed to price growth. Household income used to determine poverty status includes earnings, private pension income, income received from annuitizing assets, Social Security benefits, and Supplemental Security Income benefits.

<sup>3</sup> To derive those estimates, the model adds the projected benefits for each year of an individual's retirement and divides the resulting amount by the number of years in which benefits are received (that is, the period between retirement and death).

<sup>4</sup> This analysis tracks individuals who are ages 62 to 76 in 2037, the year before trust fund exhaustion, through 2039, the year after the trust funds would be exhausted. Therefore the individuals age 2 years.

<sup>5</sup> Social Security Administration, "Distributional Effects of the Commission Baseline Compared to Scheduled Current Law Benefits in 2059." Internal memorandum, Office of Retirement Policy, Washington, D.C. (August 2002).

<sup>6</sup> Social Security Administration, *Annual Statistical Supplement, 2002*, to the *Social Security Bulletin*, Table 3.E2 (Washington, D.C.: U.S. Government Printing Office, December 2002).

This brief was prepared by Andrew G. Biggs of the Social Security Administration's Office of Retirement Policy.

Questions about the analysis should be directed to him at 202-358-6064. For additional copies of this brief, call 202-358-6274, fax 202-358-6192, or e-mail [op.publications@ssa.gov](mailto:op.publications@ssa.gov).

### Social Security Administration

Office of Policy  
500 E Street, SW, 8th Floor  
Washington, DC 20254

SSA Publication No. 13-11702