

Defaulting on The Social Security Trust Fund Bonds: Winner and Losers

Dean Baker¹

July 23, 2001

SUMMARY

The United States government has never defaulted on its bonds throughout its entire history. President Bush's Social Security Commission is suggesting in its interim report, that the federal government will default on the bonds held by the Social Security trust fund. The trust fund has accumulated more than \$1 trillion in government bonds as a result of the fact that the payroll taxes collections have been higher than benefits for the last two decades. This is the intended result of the Greenspan Commission's decision in 1983 to have the trust fund build up a large surplus to help defray the cost of paying for the baby boomers' retirement.

Apart from the ethical issues associated with such a massive default, there are also substantial distributional issues. The taxes collected to buy the bonds held by the trust fund were primarily by low and moderate income workers through the payroll tax. The general revenue which would pay the interest and the interest and principle on the bonds comes primarily from progressive individual and corporate income taxes. If the government defaults on the bonds held by the trust fund, it would be a large transfer of wealth from the low and moderate income workers to upper income taxpayers. This study estimates the size of this transfer based on the Congressional Budget Office's model of tax incidence.

¹ Dean Baker is the co-director of the Center for Economic and Policy Research.

It finds that:

- 95 percent of households would be net losers if the Federal government defaults on its debt to Social Security.
- if the default takes place in 2002, it would lead to a net transfer of nearly \$370 billion from households in the bottom 95 percent of the income distribution to the households in the top 5 percent.
- the richest 1 percent households would have a net gain of more than \$270 billion
- the net loss from default to households in the bottom four quintiles would be equal to approximately 10 percent of a year's income
- the gains to the richest 1 percent would average more than \$300,000 per household

The upward redistribution from a default increases if the trust fund is allowed to continue to accumulate bonds prior to the default. If the default were to take place in 2016:

- more than \$1 trillion (in 2001 dollars) would be transferred from the bottom four quintiles to the households in the top 5 percent of the income distribution,
- the bottom four quintiles would lose on net an amount equal to more than 20 percent of their annual income,
- an average household in the top 1 percent of the distribution would have a net gain of more than \$730,000.

INTRODUCTION

In its 225 year history as a nation, the United States has never defaulted on its debt. In fact, one of the first acts of the new government, after the constitution was ratified, was to repay in full the debts incurred by the states during the Revolutionary War. However, President Bush's Commission is now suggesting that the United States might default on the more than \$1.1 trillion in government bonds currently held by the Social Security trust fund, approximately \$8,000 for every worker in the program. If the Commission's proposal is eventually approved by Congress, it would be the largest default in the history of the world.

Apart from the ethical and financial implications of defaulting on a portion of the national debt, there are also important distributional effects from the Commission's proposal.² The Social Security trust fund was built up by collecting payroll taxes at a level that substantially exceeded benefits over the last two decades. The Social Security payroll tax is a regressive tax on wages. It does not apply to interest and dividends and other forms of capital income. And it is also capped so that high end wage earners pay a smaller share of their income in taxes than do low and moderate wage earners. The regressive nature of the tax is offset by the progressive nature of Social Security's benefit formula.

However, the progressive benefit formula is irrelevant if the government defaults on the bonds accumulated by the trust fund, as President Bush's Commission is suggesting could be done. In this case, it would be necessary to raise revenue through the regressive Social Security tax revenue that would have otherwise been provided by payments of interest and principle from the bonds held by the trust fund. Assuming that benefits are held constant, the default implies a large increase in the payroll tax, compared to a situation where the government honored its commitment to the trust fund. Alternatively, benefits could be cut, in which case workers pay for the default through reduced benefits.

While typical workers will lose if the government defaults on the bonds held by the Social Security trust fund, there will be people who gain. Specifically, the wealthy individuals who pay most of the individual and corporate income taxes, which otherwise would have been used to repay the bonds, will be big gainers, if the government defaults on its debt to Social Security.

This study presents an analysis of the incidence of losses and gains from a default on the trust fund's bonds. It relies on estimates of tax incidence from the Congressional Budget Office to allocate the gains from a default by income quintile. It also allocates the additional Social Security taxes, which would be needed to make up for the bonds, to determine which groups are net gainers and losers under this proposal.

SCORING DEFAULT: WINNERS AND LOSERS IN 2002

The first scenario examined assumes that the Commission's proposal is quickly accepted. After 2002 the Social Security system reverts to a pay as you go system, with the government simply defaulting on the bonds accumulated by the trust fund up to that time. By the end of 2001, the trust fund is projected to have approximately \$1.2 trillion in government bonds (2001 Social Security Trustees Report, Table II.F3). On the positive side, this default means that the government will have to collect \$1.2 trillion less in individual and corporate income taxes and excise taxes than would have been necessary if it paid back the bonds held by the trust fund. The first step is calculate the gains from this saving by income group.

² If Congress were to default on the bonds held by the Social Security trust fund, which will primarily hurt and low and middle income workers, subsequent Congresses may be more likely to default on commitments to government guaranteed student and housing loans, or even standard government bonds. A default on these assets would primarily hurt financial institutions and higher income households.

Table 1 shows the total gains from the default by income quintile as well as the gains for the top 10 percent, 5 percent, and 1 percent of households. As can be seen, more than \$800 billion, or over two-thirds of the gains will be realized by the richest quintile of households. The richest 10 percent will receive over \$650 billion of the benefits, more than half of the total, while the richest 1.0 percent will get more than one quarter of the benefits from defaulting on the trust fund.

Of course, the gains are fully offset by losses in the form of higher Social Security taxes. The losses can be modeled this way even if the default is partly financed with a benefit cut, since it would have been possible to finance reduced benefits with lower Social Security taxes, if the debt to the trust fund had been repaid. Column 5 in table 1 shows the additional taxes by income quintile. Higher income households pay higher Social Security taxes, on average, but the difference is not close to proportionate to the difference in income.

Table 1

Tax Savings From a Default on the Trust Fund in 2002
Billions of 2001 dollars.

Quintiles	Ind. Inc Tax	Corp Inc. Tax	Excise Tax	Total Savings	Additional SS Tax	Net Gain
First	\$0.0	\$1.7	\$17.1	\$18.8	\$48.0	-\$29.2
Second	27.0	10.0	23.7	60.8	132.0	-71.2
Third	90.1	11.7	25.1	126.9	216.0	-89.1
Fourth	144.2	16.7	26.4	187.2	312.0	-124.8
Fifth	648.7	127.0	36.9	812.7	492.0	320.7
Top 10 %	522.6	112.0	21.1	655.7	288.0	367.7
Top 5 %	423.5	100.3	11.9	535.6	168.0	367.6
Top 1 %	252.3	66.9	5.3	324.4	48.0	276.4

Column 6 shows the net gains by income quintile. The bottom four quintiles all end up as net losers from default. The bottom quintile loses \$29.2 billion on net from the default. The second quintile loses \$71.2 billion and the fourth quintile loses \$124.8 billion. Only the top quintile comes out ahead from defaulting on the debt to the trust fund. On net it gains \$320.7 billion from default.

On closer examination, it turns out that even within this group most households are losers. The top 5 percent of the income distribution gains \$367.6 billion from default, the rest of the quintile end up as losers. The top 1 percent of the distribution experience a net gain of \$276.4 billion from default.

Table 2 shows the break down of winners and losers on a per household basis and as a share of income. Households in the poorest income quintile would experience a net increase in taxes as a result of the default of \$1,077 – approximately 10 percent of one year's income on average. The tax

increase for the second quintile averages \$2,871, approximately 10.3 percent of a year's income. For a household in the fourth quintile the tax increase would average \$7,009, or 9.7 percent of a year's income.

Table 2

**Net Tax Change by Household From a Default
on the Trust Fund in 2002
2001 dollars**

Quintile	Average per Household	Percent of Income
First	\$1,077	10.0%
Second	2,871	10.3%
Third	4,245	9.0%
Fourth	7,009	9.7%
Fifth	-18,863	-10.6%
Top 10 %	-43,255	-17.0%
Top 5 %	-85,494	-23.5%
Top 1 %	-307,126	-33.2%

Households in the top quintile get an average tax break of \$18,863, or 10.6 percent of a year's income. For households in the top 5 percent of the distribution the net gain averages \$85,494, or 23.5 percent of a year's income. The richest 1 percent of households receive an average net gain of \$307,126 or 33.2 percent of a year's income from defaulting on the bonds held by the trust fund.³

SCORING DEFAULT: WINNERS AND LOSERS IN 2016

While it is possible that the Commission's proposal for defaulting on the trust fund will be quickly approved, it is more likely that there will be considerable debate before any changes are made to Social Security. This has important implications for the calculated the gains and loses from defaulting on the trust fund, since the fund is continuing to accumulate bonds in the mean time. Currently the fund is accumulating bonds at the rate of more than \$170 billion a year. The annual surplus is projected to rise throughout the decade. If the debate continues for a significant period of time, but default is the eventual outcome, then the size of the default will be even larger, as will be the implied gains and loses. This analysis considers the extreme case, where the default doesn't take place until 2016, the year in which the trustees projections show that Social Security will first have to rely on interest from the trust fund to pay full scheduled benefits. It is likely that if there is a

³ The quintiles in CBO's analysis are divided so that the number of people in each quintile is equal. Since higher income households have more people on average, there are fewer households in the top quintile than in other quintiles.

default, it will occur before this date, but the year 2016 sets an upper bound on the size of the redistribution that would result from defaulting on the trust fund.

Table 3 shows the tax savings that each income quintile would experience as a result of a default on the bonds held by the Social Security trust fund in 2016. As was the case with a 2002 default, the vast majority of the savings would go to the top income quintile, but in the case of a 2106 default the sums are almost three times as large. By 2016 the Social Security trustees project that the trust fund will have accumulated over \$3.3 trillion dollars in government bonds. If the government were to default at that point, more than two thirds of the savings, \$2242 billion, would go to the top fifth of the income distribution. More than 40 percent of the savings, \$1,478.6 billion would accrue to the richest 5 percent of households, and more than one quarter of the total savings \$895.4 billion would go the richest 1 percent.

Table 3

Tax Savings From a Default on the Trust Fund in 2016
Billions of 2001 dollars.

Quintile	Ind. Inc Tax	Corp Inc. Tax	Excise Tax	Total Savings	Additional SS Tax	Net Gain
First	\$0.0	\$4.5	\$44.8	\$49.3	\$132.0	-\$82.7
Second	75.2	27.0	62.0	164.2	363.0	-198.8
Third	250.5	31.5	65.5	347.5	594.0	-246.5
Fourth	400.8	45.0	68.9	514.8	858.0	-343.2
Fifth	1,803.6	342.3	96.5	2,242.4	1,353.0	889.4
Top 10 %	1,452.9	301.8	55.1	1,809.8	792.0	1,017.8
Top 5 %	1,177.4	270.3	31.0	1,478.6	462.0	1,016.6
Top 1 %	701.4	180.2	13.8	895.4	132.0	763.4

The net gains in column 5 show a similar picture. As was the case with a 2002 default, the bottom 95 percent of households are net losers as a result of the default. The net gain for the top 5 percent of the income distribution is \$1016.6 billion. For the top 1 percent, the net gain from default is \$763.4 billion.

Table 4 shows the net gains and loses on a per household basis and expressed as a percentage of annual income. The net loss for an average household in the bottom quintile as a result of a default on the trust fund would be \$2654, an amount equal to 21.4 percent of their projected annual income. The net loss to a family in the second quintile would average \$6971, or 21.7 percent of their annual income. A family in the fourth quintile would lose an average of \$16,768, an amount equal to 20.3 percent of its annual income.

Table 4

**Net Tax Change by Household From a Default
on the Trust Fund in 2016
2001 dollars**

Quintile	Average per Household	Percent of Income
First	\$2,654	21.4%
Second	6,971	21.7%
Third	10,207	18.8%
Fourth	16,768	20.3%
Fifth	-45,495	-22.3%
	0	0.0%
Top 10 %	-104,126	-35.7%
Top 5 %	-205,588	-49.2%
Top 1 %	-737,549	-69.4%

The gains to the highest income families from a 2016 default are proportionately larger. Families in the top 5 percent of the income distribution would experience an average net gain from default of \$205,588 or 49.2 percent of a year's income. The average family in the top 1 percent would have a net gain of \$737,549, which is equal to 69.4 percent of a year's income.

As noted earlier, the probability that the trust fund would continue to accumulate assets, only to default to 2016, is quite low. However, it is plausible that to believe that Social Security's future could be debated until after the next Presidential election, which could lead to a possible default in 2006, or even later. The projections presented here for 2016 provide a basis for estimating the gains and losses that would result from defaults at intermediate dates between 2002 and 2016. For example, the size of the redistribution resulting from a default in 2009 would be approximately halfway between the estimates for 2002 and 2016.

CONCLUSION

The analysis in this paper provides an approximation of the redistribution that would result from the government's decision to default on the trust fund. Since such a default implies replacing progressive income taxes with a very regressive payroll tax, it leads to a substantial upward redistribution of income. An immediate default would lead to a redistribution of nearly \$370 billion to the richest 5 percent of the population. The amount of money redistributed to high income families will be even larger, if the trust fund accumulates even more bonds before the government defaults. In the event that the default doesn't take place until 2016, more than \$1 trillion will be transferred to the top 5 percent of the income distribution. The transfers implied by defaulting on the bonds held by the trust fund are quite large. If such a default is being seriously considered as a policy option, the distributional effects deserve more attention.

APPENDIX

The calculations in the text assume that the tax revenue to pay the interest and principle on the bonds held by the Social Security trust fund will be divided between individual and corporate income taxes and excise taxes in the percentages projected by the Congressional Budget Office (2001). The projections of tax incidence for a 2002 default on trust fund bonds assume that the allocation between these three taxes is the average projected over the period 2003-2011 (75.1 percent personal income taxes, 13.9 percent corporate income taxes, and 11 percent excise taxes). The projections for a 2016 default assume that the distribution between taxes is the distribution that CBO projects to be in place at the end of its projection period in 2011 (75.9 percent personal income taxes, 13.7 percent corporate income taxes, and 10.4 percent excise taxes).

The tax savings from each type of tax were allocated by income quintile following the CBO estimates of the incidence of each type of tax (CBO, 1998 table 12). The additional Social Security tax payments by quintile were also derived from this table. The change in the net tax burden per household was calculated using the data from table 11, after adjusting for growth in the number of households at a rate of 1.0 percent annually. The CBO's calculation of the incidence of the payroll tax include the Medicare tax, which is more progressive than the Social Security tax, since the wage base is not capped. Therefore these figures will understate to some extent the upward redistribution resulting from a default on the bonds held by the Social Security trust fund. The income figures were adjusted for inflation and real income growth of 1 percent in a year. Both tables use 2001 dollars.

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