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Saving the Surplus to Save Social Security: What Does It Mean?

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"Every penny that is taken out of Americans' paychecks for Social Security should be locked in a safe-deposit box so it can only be used to pay for Social Security benefits."

—From a U.S. House of Representatives Budget Committee document advocating support for the Herger Social Security Lock Box proposal, May 26, 1999.

IT IS NOT EASY TO PENETRATE THE MANY myths surrounding the Social Security debate. The proposal to put the Social Security trust fund's surplus in a "safe-deposit box" is highly popular politically and passed the U.S. House of Representatives with 416 votes in favor and 12 against. It is unlikely that many voters know what the proposal means. Luckily, the legislation that creates a "lock box" for Social Security does not actually put the trust fund surplus in a safe-deposit box. Instead, it attempts to use the funds for the worthy cause of repaying the national debt.[1]

But the surplus in the trust fund cannot be used to retire the national debt if it instead must be used to finance a deficit in the rest of government. Therefore, the real goal of the lock box legislation is to prevent deficits from arising in the rest of government. Consequently, the legislation is more important to programs outside of Social Security than it is to Social Security reform.

The legislation strives to achieve its goal by stating that any member of Congress can challenge a policy proposal that creates or increases a deficit in the rest of government. In the Senate, 60 votes are required to overcome a member's point of order. Although obscured by confusing language, the goal of the legislation is admirable.

If the lock box legislation achieves its goal, the national debt will be repaid. When the government retires the national debt by running an overall budget surplus, the interest that must be paid on outstanding bonds is reduced and national saving is increased. As a result, wealth and economic growth are enhanced because the investors whose government bonds are redeemed are likely to buy private securities to replace them. This encourages domestic investment and reduces our reliance on foreign investors. The enhanced investment increases the productivity of American workers and their wages in the long run, thus improving future standards of living.

The plan implies that the "right" amount of the overall surplus would roughly equal the surplus in the Social Security trust fund. However, the issue of choosing the right amount of the surplus is more complex than this. Deciding how large the overall surplus should be involves making a choice: enjoy more consumption today by cutting taxes and raising government spending related to consumption or postpone consumption increases and so add to future living standards. There is no reason to believe that the best choice between consuming today and in the future is achieved by a surplus that equals the surplus in the Social Security trust fund.

Nevertheless, most economists applaud the notion that the overall surplus should at least be equal to the trust fund surplus, thereby showing that the profession of economics is not above relying on myths deemed useful. Economists like this particular myth because they believe—probably correctly—that its political popularity will lead to a bigger overall surplus than could be achieved by using arguments that have more

intellectual merit. A bigger overall surplus is justified by normative models of economic growth that ask how much wealth would be left to future generations if we did for them what we wished past generations had done for us. By this standard, today's saving levels are woefully inadequate.

The purpose of this brief is to investigate the implications of adhering to the budget resolution for saving surpluses as it is described in the original budget resolution for fiscal year 2000. We investigate the impact of the plan on economic growth, the federal budget, and taxpayers, who must shoulder the burden imposed by Social Security benefits promised to future retirees. A very simple growth model is constructed to analyze the budget resolution's effect on economic growth.[2]

EFFECT OF SAVING THE SURPLUS ON NATIONAL DEBT

The budget resolution aims to save the entire Social Security surplus and to run a small surplus in the non–Social Security budget after fiscal year 2003.[3] It is almost certain that actual surpluses will be somewhat less than these amounts, because the budget resolution assumes politically unrealistic cuts in domestic spending that will not materialize. Tax cuts could further erode the surplus. However, violations of the lock box goals, although embarrassing politically, are unlikely to be large relative to the size of our $9 trillion economy and will not significantly alter the conclusions of the analysis presented here.

The details of the budget resolution are specified only through 2009. Our analysis assumes that the overall surplus continues to equal the Social Security surplus in addition to a small surplus in the rest of government until the trust fund goes into deficit in 2022 (table 1).[4]

If Social Security surpluses could be saved, our projections, which extend those of the Congressional Budget Office (CBO), imply that the entire national debt would be repaid by 2016.[5] Between 2016 and 2022, the federal government would be able to buy securities issued by the private sector, state and local governments, and government-sponsored corporations such as Fannie Mae. It is conceivable that the government could purchase foreign as well as domestic securities.[6]

It is further assumed that the alternative to running the surpluses shown in table 1 is to keep the overall, or unified, budget of the government balanced and thereby keep the national debt in the hands of the public constant.[7] This alternative will be referred to as the baseline.

In 1999, the interest on the debt in the hands of the public will be approximately $230 billion, or 2.6 percent of the gross domestic product (GDP). In the future, the interest bill will vary depending on changes in interest rates over time, but CBO projects interest rates to be roughly constant over the projection period, and we therefore assume that the absolute interest cost along the baseline will remain constant because the debt remains constant. If, instead of balancing the unified budget, the federal government runs the surpluses aimed for in the budget resolution, the entire debt will be paid off in 2016. The resulting interest saving would be $230 billion.

This interest saving represents the most important consequence of saving the Social Security surplus. In addition, we noted above that current projections imply that the government could start acquiring assets from the private and state and local sectors after 2016 and earn extra income from those assets. The amount of such assets acquired will be about $1 trillion at its peak in 2022. The Social Security trustees' projections implicitly assume that the nonfederal assets are added to trust fund balances and earn the same rate of return as government debt.[8] This implies investment income on nonfederal assets equal to slightly over $50 billion or 0.2 percent of the GDP by 2022. By that time, the interest saving on the regular debt of $230 billion amounts to 1 percent of the GDP. The total addition to budget resources is therefore 1.2 percent of the GDP in 2022.

In 2022, Social Security benefits will absorb about 1.7 percentage points more of the GDP than they did in 1999. Consequently, the interest saving in 2022 is equivalent to about 70 percent of the increase in the economic burden imposed by Social Security over the period.

Over time, the reduced burden associated with the saved interest offsets a considerable portion of the increased burden imposed by Social Security if it is not reformed by 2022. But the saved interest does not offset all the increased burden and, moreover, the burden imposed by Social Security continues to grow after 2022. This suggests that further reform of Social Security is desirable. Indeed, it may be desirable to reform Social Security sufficiently to allow some of the interest saving to be used for other purposes, such as

TABLE 1.
Projected Surplus under the Budget Resolution

Calendar Year	Non–Social Security Surplus ($ in billions)	Social Security Surplus ($ in billions)	Total Surplus ($ in billions)
2000	—	143	143
2001	—	150	150
2002	—	158	158
2003	—	168	168
2004	3	178	181
2005	10	190	200
2006	15	200	215
2007	20	210	230
2008	24	218	242
2009	28	226	254
2010	30	233	262
2011	31	238	269
2012	33	239	272
2013	34	238	272
2014	36	230	266
2015	38	218	256
2016	40	202	241
2017	41	180	221
2018	43	153	197
2019	45	121	166
2020	47	83	131
2021	50	41	90
2022	52	–5	47

Note: The data are based on House Conference Report 106-91 to accompany H. Con. Res. 68. The projections extend through 2009 and are by fiscal year. Fiscal year data were first converted to calendar year (CY) data. The projections were then extended using two different methods: (1) For the non–Social Security surplus data, the surplus was assumed to stay at 0.2 percent of CY GDP (GDP projections taken from the 1999 Trustees' Report); (2) For the Social Security surplus data, the converted CY data were assumed to grow at the same annual rate as the CY projections made in the 1999 Trustees' Report. Totals may not add due to rounding.

Source: Authors' projections, the Urban Institute (1999).

programs for children or defense or for tax cuts. Together with Medicare, Social Security will absorb almost 55 percent of total government revenues by 2022, and society will have to ask whether so many resources should be spent on the elderly, whose poverty rate is already lower than that of the rest of the population.

EFFECT OF THE SURPLUS ON ECONOMIC GROWTH

The effect of saving the Social Security surplus on economic growth is relatively small. As large as the surplus numbers seem, they are not large relative to the massive capital stock owned by this wealthy nation.

To investigate the quantitative dimensions of the growth effect, a relatively simple model was used. It is described briefly in the accompanying box (see page 5). Although a more sophisticated model might have yielded somewhat different results, it is unlikely to have altered our conclusion. The analysis focuses solely on the addition to growth resulting from running a surplus. If the government were to balance the budget instead, it would be able to cut taxes and/or increase spending. These tax cuts or spending increases could be designed to have positive effects on the growth rate, but our analysis assumes that this would not occur. The

policies that would be adopted along with a balanced budget are assumed to have no net effect on growth. For example, the government might undertake spending increases that directly or indirectly stimulate the consumption of goods and services rather than stimulating investment.

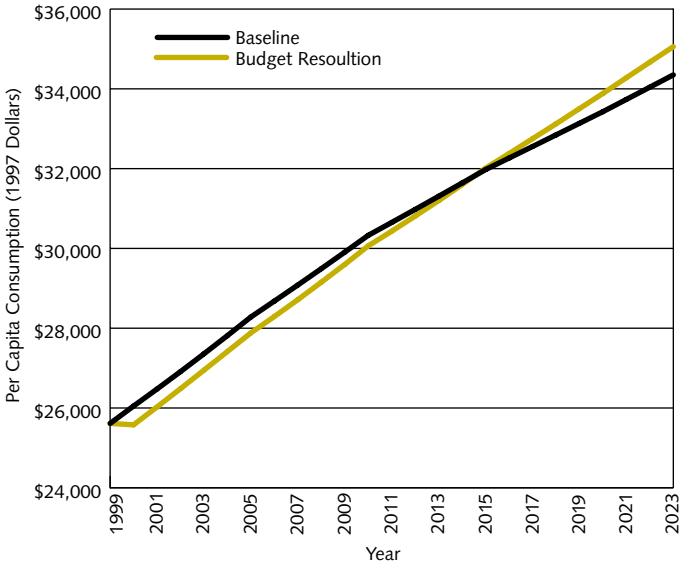
The surplus saving policy increases the rate of growth of consumption per capita by less than 0.1 percent per year on average between 1999 and 2023. With the surplus saved, the consumption of goods and services at first falls compared to the balanced budget baseline, which might have resulted in tax cuts, increased transfer payments, or more government spending on public consumption. The growth rate of consumption increases as the saved surplus is converted into a larger capital stock, which makes productivity and income grow more rapidly. After 2008, the surplus begins to decline relative to GDP. The increase in government spending relative to tax collections allows a further increase in consumption relative to the baseline, but consumption does not exceed its baseline levels until 2015. By the year 2023, consumption per capita is about 2 percent, or $707 per capita (in 1997 dollars), higher than it would have been if the surplus had not been saved (figure 1). This consumption differential persists far into the future, but it declines in percentage terms because saving declines to baseline levels and growth slows after the policy ends in 2022.

Because the rate of growth of the labor force slows after 2010, consumption growth will slow whether or not the surplus is saved. However, the slowdown is less pronounced if the surplus is saved. By reducing consumption before 2015 and raising it later, the policy has the effect of smoothing out the growth rate of consumption over the very long run.

Because Social Security benefits for new retirees are indexed to increase along with wages, the increased payroll tax receipts resulting from increased growth of the economy are largely offset and the financial status of the trust funds is not changed significantly. Similarly, the effect of the increased economic growth on the ratio of Social Security benefits to GDP is negligible.

The model used for this analysis assumes that technological change proceeds independently and is not affected by the level of investment. Some have argued that investment is necessary to implement new technologies or that faster growth itself breeds more innovation because it provides more resources for research and development. If such an effect had been accounted for in our model, saving the surplus would be somewhat more important to future living standards, but the effect would still be relatively small. In models of this type, the effect on per capita consumption in 2023 would probably be less than 3 percent.

FIGURE 1.
Projected Per Capita Consumption, Alternative Cases (1999–2023)



Source: Authors' calculations, the Urban Institute (1999).

One of the benefits of the surplus policy is that the United States becomes less dependent on savings from abroad. Our analysis assumes that a $2 increase in the budget surplus reduces foreign borrowing by $1. This assumption is broadly consistent with the findings of large international econometric models.[9] The increased capital formation resulting from saving the surplus and the reduced liabilities to foreigners add to American wealth. With more wealth, Americans will have additional income in the future and some of the gain in net income will come from having to devote a smaller portion of American production to paying interest and dividends abroad. The 2 percent gain in consumption per capita referred to earlier reflects both the increase in American production and the fact that a greater share of the income generated by that production stays at home.

SMALL BUT GOOD EFFECTS

Saving the Social Security surplus has two good effects. The most important effect of the policy involves repaying the entire national debt and not having to pay interest on that debt. This interest saving is sufficient to cover about 70 percent of the increase in the share of GDP going to Social Security between 1999 and 2022. Because benefits will continue to grow after that time, more must be done to reform the system.

The effect of the surplus policy on economic growth is disappointingly small, although still beneficial. Consumption per capita is increased only by about 2 percent by 2023 and by a decreased percentage, but increased absolute amounts, after that time. The policy may be motivated by myths surrounding the Social Security trust funds, but it will benefit future generations.

THE MODEL

To analyze the effect of saving the surplus on economic growth, we used a function, known as a Cobb-Douglas production function, that relates the growth of total economic production to the growth of the labor force, the growth of the capital stock, and the rate of technological change. It was assumed that technological change increases the productivity of capital and labor at a rate of 1 percent per year. The effect of saving the surplus is computed by simply adding the inflation-adjusted yearly amounts shown in table 1 to national saving, thereby raising the total wealth of Americans.

The model was originally constructed to investigate the effect of changing demographics on the rate of economic growth. The baseline, therefore, reflects the fact that labor-force growth will slow in the future and that the capital stock will not grow as rapidly because an aging society will tend to consume more of its income.

The simulations assume that half of any increased national saving adds to the capital stock at home and half reduces net foreign capital inflows. The half that adds to the domestic capital stock directly increases national output through the production function; the half that lowers foreign capital inflows reduces net interest payments to foreigners, thereby increasing the share of domestic output that represents income of U.S. residents.

ENDNOTES

[1] Technically, the term "national debt" includes the debt held by government trust funds. This is debt that the government owes itself. In this article, the term "national debt" will refer only to the debt held by private investors and the Federal Reserve System.

[2] The growth model used for the analysis produces a baseline that differs from that produced by the Congressional Budget Office (CBO). Experimentation with the model suggests that the results of adding specific amounts to national saving are not sensitive to the choice of a baseline.

[3] The president also proposed a lock box in his Mid-Session Review of the Budget.

[4] The budget resolution is based on projections by CBO in April. CBO produced somewhat more optimistic assumptions in July, allowing the budget resolution to be modified, but at the time of writing the shape of the modifications was not yet clear. Through 2009, CBO projects slightly higher Social Security surpluses by about 0.1 percent of GDP than do the Social Security trustees. CBO does not make detailed projections beyond 2009. In this analysis, we use the CBO projections for the period through 2009 and then add 0.1 percent of GDP to the Social Security trustees' estimates in the period from 2010 through 2022. The nominal surplus amounts are converted into real dollars before being entered into the growth model.

If the trustees' projections had been used, rather than CBO's, saving the surplus would be slightly less beneficial than shown in this analysis.

[5] Note that a considerable portion of the national debt is in the hands of the Federal Reserve. The debt in the hands of private investors could be retired several years before 2016.

[6] If this actually happens, deciding what the trust fund should buy could touch off an intense policy dispute. The issue is complicated by the fact that whatever it buys will have to be sold quickly after 2022, potentially disrupting markets.

[7] The trust fund accounting underlying this saving is a bit complicated. In the case where the Social Security surplus is saved, the Social Security trust fund ends up owning the entire national debt and by 2016 the rest of government will be paying interest equal to roughly $230 billion to the trust fund. In the case where the unified budget is balanced, that is to say, the rest of government runs a deficit exactly equal to the trust fund surplus and the debt in the hands of the public remains constant, the rest of government will still pay the same interest to the trust fund but will owe additional interest to the public worth 2.6 percent of the GDP.

[8] The trustees' reports do not explicitly describe the fiscal policies that they deem consistent with their long-run projections. The reports are written as though the rest of government will create sufficient debt that the trust fund will never have to worry about investing in nonfederal securities. That is assumed even though the trust fund balance at its maximum considerably exceeds the current public debt.

[9] John F. Helliwell. "The Fiscal Deficit and the External Deficit: Siblings but Not Twins." In *The Great Fiscal Experiment*, edited by Rudolph G. Penner (21–58). Washington, D.C.: Urban Institute Press, 1991.

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THE RETIREMENT PROJECT

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The Retirement Project

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