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Financing Social Security

Although the federal budget is in overall deficit, the Social Security system has been running increasing surpluses in recent years. Projections suggest that this surplus will continue to rise for at least the next twenty years, as annual payments to beneficiaries rise less rapidly than receipts from payroll taxes. To the extent these surpluses increase national saving and investment, the total output of the U.S. economy will grow, easing the burden on future workers of supporting future retirees.

Whether these surpluses do, in fact, lead to increased saving and investment depends, in part, on what happens to the deficit in the non-Social Security portion of the federal government budget. If this deficit rises, saving likely will be lower than the Social Security surpluses alone would suggest, and the burden of meeting obligations to future retirees will be greater.

This *Letter* describes how Social Security is financed and discusses how alternative uses of the Social Security surpluses may affect the nation's ability to support its rising population of older citizens in the twenty-first century.

Providing for retirement

All societies develop methods of supporting the elderly when they cease to earn income. One approach is for individuals to accumulate savings during their working lives, which they can use to support themselves in retirement. If those savings are invested in productive assets, the total output of the economy grows more rapidly over time, thus making it possible for retirees to consume more during their retirement than they had set aside. Pension funds are an institutional example of this approach.

An alternative approach is for each generation to support the generation that came before it. In extended families, for example, working couples support their non-working parents. They are willing to do this because they count on their children, in turn, to support them later in their lives. The U.S. Social Security system, to a large extent, formalizes this arrangement. While young, each generation provides benefits to the generation that came before it, and in turn, receives benefits from the succeeding generation.

Pay-as-you-go

Broadly speaking, this second approach to providing for retirement represents a pay-as-you-go approach. In the most extreme case, benefits to Social Security recipients in any given year come directly from the payroll taxes collected from workers in the same year. In this case, the system is a pure inter-generational transfer program, and no net saving occurs. Nonetheless, as long as the size of each succeeding generation exceeds the size of the generation before, retirees will receive more in benefits than they contributed while working, even though payroll taxes per worker remain constant. Nobel-laureate Paul Samuelson has described this return as the "biological rate of interest."

A pay-as-you-go system can run into problems if population growth slows, since this causes the ratio of young workers to older, nonworking persons to decline. In such a circumstance, higher taxes may have to be imposed on the young to maintain the same level of benefits to the old. Moreover, cyclical fluctuations in tax revenues can cause temporary liquidity problems for a pay-as-you-go system.

Because of these potential problems with a pure pay-as-you-go system, the U.S. Social Security system is organized into trust funds that allow some mismatch between receipts and disbursements in any given year. Payroll taxes levied on workers and their employers, which are officially termed "contributions," are paid into the Old-Age, Survivors and Disability Insurance (OASDI) Trust Funds. In turn, Social Security benefits are paid from these trust funds. This trust fund system was designed to insulate benefit payments from current tax receipts and so assure participants that their benefits would be paid.

When the system was established in 1935, it was projected that, over time, the trust funds would accumulate sizeable reserves, which would

generate interest earnings to pay a significant portion of the annual benefits. To ensure that adequate initial reserves were accumulated, no benefits were to be paid until 1942, although tax collections were to begin in 1937. At the same time, however, the system never was intended to operate like a private pension fund, since benefits also were to be paid directly out of current tax receipts.

In practice, the trust funds did not accumulate large balances, because Congress frequently raised benefit levels and extended coverage to new groups of recipients. As a result, over most of its history, the system has operated on a *de facto* pay-as-you-go basis, with benefit payments out of the trust funds each year being financed mainly from that year's payroll tax receipts. Each generation of retirees was able to receive in benefits more than it had contributed, however, because the working population was growing steadily and because rising real incomes made it possible to levy increasing taxes on those working. In addition, for a long period after 1950, the ratio of the assets of the trust funds to their annual outlays was allowed to decline.

The coming surplus

By the early 1980s, the ratio of reserves to annual outlays had become dangerously low. In 1981, the assets of the OASDI trust funds were sufficient to cover only two months of benefits. There was concern that if payroll tax receipts were to fall in any future recession, the trust funds would be inadequate to meet monthly payments to beneficiaries. Largely as a result of this concern, the Congress passed the Social Security amendments of 1983.

These amendments, which followed the recommendations of the National Commission on Social Security Reform (the Greenspan Commission), were designed not only to address the short-run liquidity problem facing the system, but also to put it into long-run actuarial balance, with the present value of projected future outlays close to the present value of future receipts. The reform involved a series of increases in payroll taxes together with changes designed to reduce the future growth of benefits.

As a result of this reform, the trust funds are projected to grow sharply over the next thirty years, reaching a peak in the year 2019, before declining to zero in 2050. This reserve build-up is necessary because the currently-young generation—the baby-boomers—is unusually large and will place heavy demands on the system when it retires and begins receiving benefits in the second and third decades of the next century. To pay those benefits solely from payroll taxes levied on the next generation would require sharp increases in tax rates in the future.

A recent study by economists at the Brookings Institution (*Can America Afford to Grow Old?*, by Aaron, Bosworth, and Burtless) estimated that under pure pay-as-you-go financing, the combined employee-employer payroll tax rate could be cut to less than 10 percent in 2005, but would then rise above 15 percent by 2030. Current law, in contrast, calls for a constant tax rate for the Social Security portion of FICA of 12.4 percent. By levying taxes now that are higher than required to meet current benefit payments, the system will build up reserves that can be used to finance benefits for the boomers in the future and, it is hoped, equalize the burden between the boomers and their children.

Long-run balance

The tax and benefit changes introduced in 1983 were designed to place the system in present-value, actuarial balance over a 75-year horizon. However, as time passes and the working (and tax-paying) population increases more slowly than the beneficiary population, the longer-run balance of the system likely will be upset. Projections suggest that without further changes in taxes or benefits (apart from those already mandated), the trust funds will be out of actuarial balance for the 75-year horizon beginning in the year 2000, in the sense that the present value of tax receipts over that period will fall short of the present value of benefits.

A modest increase in taxes between now and the end of this century, followed by further increases in about 2020 and 2050, would keep the funds more or less permanently in actuarial balance. Such increases also would prevent the funds from being depleted in 2050. Obviously, these projections are extremely tentative, since they depend on the growth of the economy and of the population in the very distant future.

Easing the burden

Regardless of the way in which the consumption of the retired, nonworking population is financed, it is always the case that this consumption must be met from the output of the current working generation. Building up financial assets in a social insurance fund like Social Security

does not by itself alter the cost of providing for the elderly. However, the *burden* of these demands on the young may be affected by decisions regarding the way in which Social Security is financed and its accumulated surpluses are invested.

In particular, these decisions may affect the shares of GNP that are saved and invested and so influence how large GNP will be in the future. For example, if the present generation of workers reduces current consumption (including government consumption) in response to the recent rise in Social Security taxes, the increase in Social Security surpluses will represent an increase in national saving, and more of the nation's resources will be devoted to productive investment. This will mean that future GNP will be higher because workers will be equipped with more capital, and as a result, the future working generation will be better able to provide for the elderly. However, this will not be the case if the Social Security surplus is offset by greater deficits elsewhere in the federal government budget.

The Brookings study referred to earlier illustrates how Social Security-related financing and spending decisions can affect the distribution of the burden of providing for the elderly in the future. This study compared the implications of two alternative scenarios. Both scenarios maintain the current Social Security benefit schedules and raise payroll taxes whenever necessary to keep the Social Security system in actuarial balance.

The first scenario uses the surpluses that accumulate in the trust funds to finance increases in spending and/or reductions in taxes elsewhere in the government's budget. Thus, the combined federal budget deficit remains constant as a share of GNP, and the surpluses do not add to national saving.

The second scenario, in contrast, does not allow the trust fund surpluses to finance larger deficits elsewhere in the federal budget. Instead, fiscal policy is adjusted to ensure that the deficit in the non-Social Security part of the budget remains constant as a share of GNP. This fiscal assumption means that all of the accumulations to the Social Security funds represent additions to national saving and investment.

In both scenarios, the Brookings study assumes that the proportion of national income that is saved by the private sector remains constant and is not affected by the saving of the government sector. Economist Edward Denison has found evidence to support this view, although some economists still would challenge it.

The results of the Brookings calculations are striking. Under the second scenario, both the working population and the retirees enjoy higher living standards in the next century. Beginning in about 2010, overall consumption (public and private) is higher by one to three percent and retiree benefits by three to five percent. Moreover, the cost to the present generation in the form of lower private and public consumption is surprisingly small. The second scenario implies an average level of total consumption between now and the beginning of the next century that is only one percent lower than in the first scenario.

Increased saving needed

To the extent that government deficits reduce national savings, and hence national investment, they transfer the nation's resources to the current generation and away from future generations. This transfer occurs regardless whether deficits arise in the Social-Security or non-Social Security portions of the overall budget. This suggests that policy makers should focus on the overall budget, rather than on its components.

At the same time, however, the coming change in the age distribution of the population suggests that it may be prudent to try to raise the national saving rate to ease the burden of supporting the aging boomer generation. A policy that aimed to hold the deficit in the non-Social-Security part of the budget constant, despite the growing surpluses in the social insurance funds, might help to achieve this result.

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