Can faster growth save Social Security?

Author: Rudolph G. Penner

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CAN FASTER GROWTH SAVE SOCIAL SECURITY?

By Rudolph G. Penner*

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INSIDE

Introduction

Numerous commissions, individual researchers, and the Trustees of the Social Security system agree that the current Social Security system is not sustainable. The 2003 Trustees' report forecasts that the program's two trust funds (Old Age and Survivors Insurance and Disability Insurance or OASDI) will be empty in 2042. After 2042, Social Security taxes would only cover about 70 percent of projected benefit costs. Even before the trust funds are exhausted, the combination of rapidly growing Social Security, Medicare, and Medicaid spending is likely to create intolerable budget pressures that will force major changes in policy.

The problem lies in demography. The economic burden imposed by these pay-as-you-go programs depends on the number of beneficiaries and the level of benefits that they have been promised. The economic resources available to the programs depend on the number of taxpayers and their ability and willingness to pay taxes. The population of elderly beneficiaries will soar in the future because of increased life expectancy and the retirement of baby boomers — the first boomers will apply for Social Security pensions in 2008. Meanwhile, the population of workers paying payroll taxes will stagnate because of low birth rates experienced since the early 1960s.

Although there is a broad consensus that the Social Security system is in trouble, a few dissenters argue that the Trustees are too pessimistic about future economic growth.[1] The dissenters believe that a more realistic growth assumption would allow the trust funds to remain financially sound far longer than now expected. This *brief* will examine the implications of more rapid economic growth for Social Security and the federal budget as a whole, including a discussion of both the direct and indirect effects of growth.

* Rudolph G. Penner is a senior fellow at the Urban Institute and holds the Arjay and Frances Miller Chair in Public Policy. He is also a research associate of the Center for Retirement Research at Boston College.

[1] Baker (1996).

Direct Effects of Economic Growth

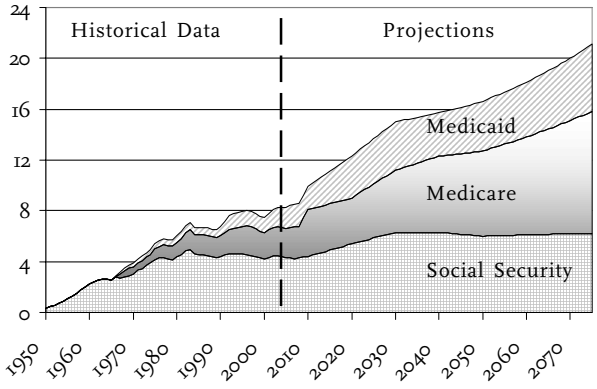
Increased growth does not much help Social Security's financial outlook because of the way that Social Security benefits are indexed.[2] In 1977, the Congress made a philosophical decision that a person's initial real benefits should be increased automatically as average real wages increased throughout the economy. The Congress wanted to ensure that Social Security recipients enjoyed some share of the benefits of economic growth. The goal of the current indexing formula is to keep the replacement rate constant on average for successive age groups. The replacement rate is defined as the ratio of initial benefits to pre-retirement earnings.[3] While initial benefits are indexed to wage growth during a participant's worklife, afterwards they are indexed only for inflation using the Consumer Price Index (CPI), which means that real benefits are kept constant after individuals first begin to receive them.

If the economy grows faster, so do worker's wages. Such growth has two different effects on Social Security's finances. Initially, higher growth increases payroll tax receipts but not payments to those already retired, since their benefits are only indexed to inflation. Over time, however, growth in wages also raises initial benefits for the next generation of retirees, which erodes the positive effect of greater tax revenues. On balance, higher growth has only a modest beneficial impact on the financial health of the system and that beneficial impact occurs only because those already retired do not share in the benefits of growth.[4]

Social Security's Trustees have traditionally measured the financial health of the system by the gap between the present value of promised benefits and payroll tax revenues over the next 75 years. In the 2003 Trustees' report, the program's actuaries estimated this gap to be 1.92 percent of the payroll expected over the projection period. The projected wage growth underlying this projection assumes labor productivity growth of 1.6 percent.[5]

The Social Security Trustees perform sensitivity tests to determine the importance of changing their economic and demographic assumptions. They show that an increase in real wage growth of 0.5 percent per year would reduce the actuarial deficit in the system by 0.51 percent of payroll. With such an increase in wage growth, the trust funds would be empty in 2049 — only seven years later than under the intermediate assumptions used as a base case. Faster growth lowers both the cost and income rates, and it reduces the gap between them by the middle of the century. But the gap remains significant and the cost rate with higher growth does not move downward toward the income rate. An especially rapid increase in the cost rate between 2010 and 2030 will exert serious pressures on the overall federal budget when it is combined with an even more rapid increase in the cost of Medicare and Medicaid (see Figure 1). The Comptroller General, head of the U.S. General Accounting Office, has noted that it would take double-digit annual economic growth to completely solve the future budget problems caused by both pensions and health care.[6] Such growth rates are not within the realm of possibility.

Figure 1. Social Security, Medicare, and Medicaid Outlays as a Percentage of GDP, Fiscal Years 1950-2075



Source: Congressional Budget Office (2002).

[2] Social Security's benefits and its payroll tax base were first indexed in 1972. The formula was designed to overcompensate beneficiaries slightly for inflation, so that their standard of living would not fall too far behind that of wage earners, whose compensation would be enhanced over time by economic growth. Unfortunately, the original formula was flawed in that it proved to be overly generous. The indexing techniques were corrected in 1977.

[3] For those applying for Social Security at any specific age, such as 65, replacement rates will fall over time because the full retirement age is gradually being increased, and people applying for benefits earlier than that age will have their benefits reduced by an actuarial adjustment. The full retirement age will eventually reach 67 for those born after 1959.

[4] The benefit from growth is a bit larger than indicated above since the worker's wage-adjusted benefit is computed at age 60, rather than the actual age when the worker claims benefits, and indexed only by the CPI after that time.

[5] In the long run, the real growth in labor compensation approximates the average rate of growth of labor productivity. Wages will grow less rapidly than productivity if fringe benefits are a growing portion of total compensation.

[6] The Comptroller General was referring to a situation in which recent tax cuts were made permanent and discretionary spending grew at the same rate as the gross domestic product (GDP) in the long run. The future budget problem was measured by the "fiscal gap," i.e. the amount that taxes would have to be raised or spending lowered as a share of GDP in order to keep the ratio of public debt to GDP constant at today's level. See Walker (2003).

But how likely is it that actual real wage growth will be higher than assumed by the Trustees, thus mitigating future problems to some degree? Over the past half century, the Congressional Budget Office's (CBO) estimate of potential labor productivity growth was 1.73 percent per year, only 0.13 percent per year above the Trustees' 1.6 percent assumption.[7]

CBO assumes that the productivity growth rate over the next 10 years will be 1.97 percent per year. This projection is slightly higher than the historical average as the nation continues to apply the fruits of recent, extraordinary technological advances in communications and computing. But even if such a high productivity growth rate were to continue for 75 years — and that seems unlikely — Social Security would continue to have significant financial problems.

It must also be noted that, although those who argue that the Trustees' growth assumptions are too pessimistic may have some recent evidence on their side, other critics argue that the Trustees are underestimating future increases in life expectancy.[8] Although more rapid improvements in life expectancy would be good news for society, it would worsen Social Security's financial outlook.

The Trustees provide an alternative approach to judge the importance of the uncertainty surrounding their assumptions, using an analytic tool called "stochastic analysis." This analysis examines historical variations in important demographic and economic variables and explores relevant relationships among variables. Analysts use these data to estimate how random fluctuations might cause variables to stray from the values assumed in the intermediate estimates of the Trustees. They run 5,000 experiments drawing values at random from the implied probability distributions. These values are then used to develop a probability distribution of financial outcomes for the trust funds. At the optimistic end of the distribution, all the important economic and demographic variables, including economic growth rates, have to have deviated significantly in a favorable direction from the values assumed in the intermediate projections.

The stochastic analysis implies that there is only a 2.5 percent chance that the trust funds could last beyond 2074 and only a 10 percent chance that they could last beyond the late 2040s. So, even with optimistic outcomes for important economic and demographic variables relative to those assumed in the intermediate estimates, chances are slim that the trust funds will last much beyond mid-century.[9] Given this finding, it is even less plausible to believe that good luck regarding growth alone could save the system. And as noted previously, overall budget pressures related to the combined effects of Social Security, Medicare, and Medicaid are likely to cause a budget crisis long before the OASDI trust funds are emptied.

Indirect Effects of Economic Growth

Although it is implausible to assume that increased economic growth can preserve the financial health of the Social Security system indefinitely, it is conceivable that increased growth can make necessary policy changes less painful. These policy changes could include raising taxes, reducing the growth rate of Social Security benefits, or restraining growth in other government programs.

Raising Taxes

One could argue that the public will become more tolerant of increased federal tax burdens as people become richer. However, the record of the past 50 years provides no support for this hypothesis. Figure 2 shows that the tax burden has been remarkably constant since the late 1940s, even though the standard of living has approximately tripled over this period. Every time the overall tax

Figure 2. Receipts as a Percentage of GDP, 1946-2003

Source: Office of Management and Budget (2003).

Note: 2003 figure is an estimate.

[7] Potential labor productivity growth represents CBO's estimate of the rate of growth of potential gross domestic product, that implied in a full-employment economy, over the rate of growth of the labor force at full employment. Actual labor productivity growth varies around this number for cyclical and other reasons.

[8] For an argument that the Trustees should reduce the assumed mortality rate somewhat more rapidly, see Technical Panel on Assumptions and Methods (2003).

[9] Of course, if the experiment started with a more optimistic set of assumptions than used in the Trustees' base estimate, the chance of the trust funds' reserves surviving for 75 years would be greater.

burden has exceeded 19 percent of the nation's economic output (known as the gross domestic product or GDP), Congress has enacted a substantial tax cut, most recently in 2001. Presuming that elected representatives fairly represent the tastes of their constituents over the long run, voters would have to dramatically change their attitudes to accept future tax increases.

Reducing Growth in Social Security Benefits

Given that future tax increases would imply a radical break from the past, could it be argued that the rate of growth of the real value of Social Security benefits need not be as fast if living standards improve? In other words, replacement rates might be allowed to erode so long as the absolute living standards of retirees are not cut. Current payroll tax rates are, in fact, sufficient to finance small increases in average real benefits for at least the next 30 years.

Acceptance of lower replacement rates would also require a significant change in political attitudes. As noted earlier, the system is firmly based on the value judgment that replacement rates should be held constant over time. In the current political debate, any reduction of replacement rates is referred to as a cut in benefits even if the reduction is slow enough to allow the living standards of the retired population to grow absolutely.

Restraining Spending in Other Programs

If tax burdens and replacement rates are not changed with economic growth, is it possible to obtain the necessary resources for Social Security by reducing the share of GDP used for other government programs? That task would seem relatively easy if Social Security were the only problem. Its share of the GDP is expected to rise by only a bit more than 2 percentage points over the next 30 years. However, this increase coincides with the aforementioned, much larger increase in the burden imposed by Medicare and Medicaid, which will be absorbing 4 percentage points more of the GDP in 30 years.

The increase in the cost of these three programs has been about 8 percent of GDP over the previous 50 years. This increased cost has been largely financed by a decline in defense expenditures relative to GDP. Economic growth has allowed us to remain the foremost military force in the world while devoting a lower and lower portion of our economic resources to defense (see Figure 3). This process was well under way before the end of the Cold War, but has accelerated since and has only been interrupted in a minor way by wars in Afghanistan and Iraq.

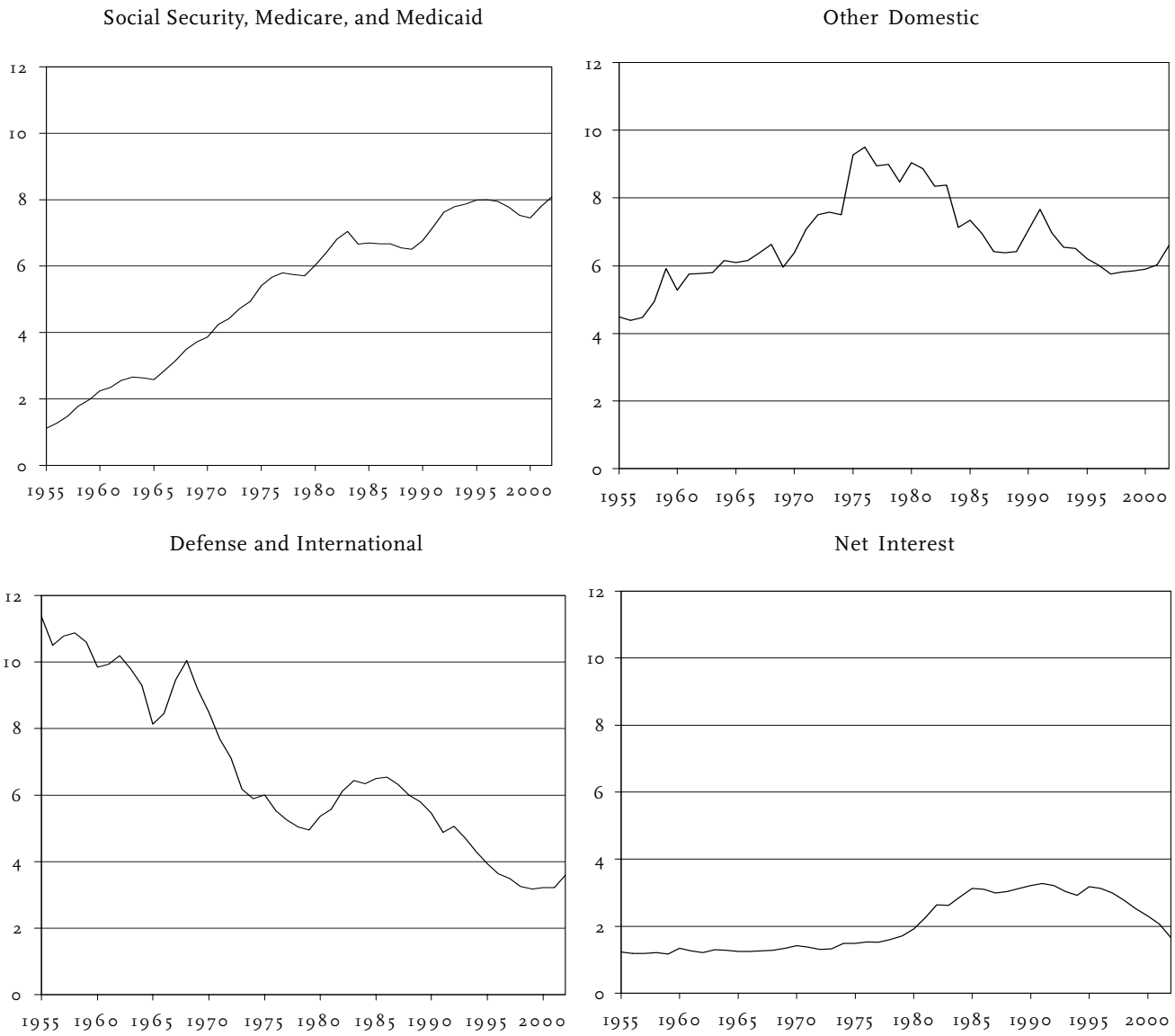
Unfortunately, decreases in the relative importance of defense can no longer finance the expected growth in Social Security, Medicare, and Medicaid. Defense spending has fallen to about 4 percent of the GDP. Even taking defense spending to zero would only finance two thirds of the expected 6 percentage point increase in Social Security, Medicare, and Medicaid spending.

Might the increase in the share of GDP going to Medicare and Medicaid be muted by faster economic growth? This issue has not been studied as carefully as have the effects of economic growth on Social Security. But, in the past, the nation has spent a higher and higher portion of its income on health care as it has become richer. This tendency makes it seem likely that extra growth would increase the demand for health care services more rapidly, thus increasing health costs more rapidly. If so, faster growth may not reduce the burden of federal health spending much, if at all.

Conclusion

Given the pending demographic pressures on the federal budget, we face a serious problem. Increased growth cannot save us from breaking strong historical precedents. Further cuts in the ratio of defense spending to GDP cannot continue to finance the increase in the costs of pension and health programs for the elderly. Either the overall tax burden has to rise above the levels of the past, or the growth in benefits for the elderly has to slow compared to what is now promised. Absent such departures from past history, the remaining options become highly unpleasant. The budget deficit will have to grow to unsustainable levels, or government spending for things like infrastructure investment, entitlements for the poor, or pension, health, and disability benefits for retired military and civil servants will have to be squeezed out. Enhanced economic growth is obviously beneficial, but it cannot be beneficial enough to solve the demographic problems confronting the federal budget.

Figure 3. Federal Outlays as a Percentage of GDP, 1955-2002



Source: Office of Management and Budget (2003).

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About the Center

The Center for Retirement Research at Boston College, part of a consortium that includes parallel centers at the University of Michigan and the National Bureau of Economic Research, was established in 1998 through a grant from the Social Security Administration. The goals of the Center are to promote research on retirement issues, to transmit new findings to the policy community and the public, to help train new scholars, and to broaden access to valuable data sources. Through these initiatives, the Center hopes to forge a strong link between the academic and policy communities around an issue of critical importance to the nation's future.

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Contact Information

Center for Retirement Research
Boston College
Fulton Hall 550
Chestnut Hill, MA 02467-3808
Phone: (617) 552-1762
Fax: (617) 552-1750
E-mail: crr@bc.edu
Website: http://www.bc.edu/crr