

# CAN FASTER ECONOMIC GROWTH BAIL OUT OUR RETIREMENT PROGRAMS?

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As baby boomers reach retirement age and health care costs increase, spending on entitlement programs will escalate and put enormous pressure on the federal budget.<sup>1</sup> Numerous commissions and individual researchers agree current fiscal policy is unsustainable. Is faster economic growth the solution?

About half of federal expenditures outside of defense and interest are devoted to people age 65 and up. The elderly population is growing rapidly and life expectancy continues to increase, lengthening periods of retirement. Meanwhile, the number of taxpayers will grow relatively slowly because of low birth rates since the mid-1960s.

Population aging alone is expected to cause Social Security, Medicare, and Medicaid costs to rise by about 3.5 percent of the gross domestic product (GDP) by 2030 (see figure 1). Add the soaring health expenses per capita and the cost of the three programs rises by about 6 percent of GDP. If other government programs maintain the same share of GDP and the overall federal tax burden remains at roughly today's level—which slightly exceeds the average of the past 50 years—the national debt in the hands of the public will skyrocket from 36 percent of GDP in 2007 to 100 percent of GDP in 2030.<sup>2</sup> Without fiscal reforms, the debt-GDP ratio will continue to accelerate until

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<sup>1</sup> This brief is an expansion and update of Penner (2003).

<sup>2</sup> The numbers used here are from CBO (2007b). The numbers refer to their “alternative” or more pessimistic fiscal scenario. CBO also publishes a more optimistic scenario, but even the most pessimistic scenario can be said to be overly optimistic because it assumes a dramatic slowdown in health cost growth after 2018 and that growing budget deficits have no impact on long-term economic growth. GAO (2007) has also produced various budget scenarios that are similar to CBO's. See also OMB (2007).

collapsing confidence in domestic and foreign capital markets brings the process to an abrupt halt.

Some believe that this prediction greatly exaggerates the extent of our long-run fiscal problems. In particular, skeptics believe that government economists who create this scenario are overly pessimistic about future economic growth.<sup>3</sup> Their argument raises two separate issues. First, are the growth assumptions underlying this scenario really too pessimistic? Second, even if they are too negative, will faster growth cure our budget problems?

### **Future Growth Rates**

The official scenarios assume rates of aggregate economic growth that are considerably lower than historical averages. For example, the Congressional Budget Office (CBO) analysis assumes an average potential annual growth rate of 2.7 percent<sup>4</sup> between 2007 and 2017 and only 2 percent between 2018 and 2030. The growth rate from 1950 to 2006 was 3.4 percent. The CBO assumes a lower rate of growth in the future because of the slower rate of growth in the labor force associated with low birth rates over the past four decades.

Although the number of available laborers is expected to grow at a declining rate, the productivity of each laborer is expected to grow at historical rates. Since 1950, productivity has grown at an annual rate of 1.8 percent. As we go forward, CBO analysts assume a rate of 1.9 percent.

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<sup>3</sup> Detailed criticisms are more often explicitly directed at the assumptions of the trustees of the Social Security system than at CBO economists, but the growth assumptions of various groups of government economists are very similar (see Baker 1996 and Gordon 2003).

<sup>4</sup> This is the potential growth rate if the economy remained at full employment.

It is highly unlikely that the analysts are making a big mistake regarding future labor force growth because almost everyone who will be working in 2030 has already been born. The workforce could grow a bit more rapidly if people decide to retire later than expected,<sup>5</sup> immigration policy is liberalized (unlikely given that anti-immigration sentiment has grown recently), or because of other unanticipated increases in labor force participation. But it is difficult to believe that such surprises could have a very large quantitative effect on the potential growth rate.

Productivity increases are more difficult to project, because they have varied significantly over past decades. For example, the rate of growth from 1950 to 1973 was 2.3 percent, but then fell dramatically to 0.7 percent between 1974 and 1981.

### **Effects of Growth on Medicare and Medicaid**

Let's assume that CBO and other government analysts are too pessimistic and that we can emulate the higher productivity growth in the 1950-1973 period (0.4 percentage points more per year than is now assumed). Without reform, we would still have the problem of financing the higher cost of Medicare and Medicaid in the future.

Let's consider what would happen in 2030. Under the assumption of higher productivity, the GDP would be about 10 percent higher than implied by CBO assumptions. If the growth of Medicare and Medicaid costs stays the same, their ratio to GDP would be about 7.6 percent (lower than the 8.4 percent currently assumed by CBO). The ratio of Medicare and Medicaid to GDP was 4.1 percent in 2007, which means we'd need to figure out how to finance an increase in the cost of these programs equal to 3.5

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<sup>5</sup> There is more and more support for policies that would encourage people to work longer. However even if such policies are implemented, they are unlikely to have a very large impact on the growth rate of the total labor force.

percent of GDP. That's equivalent to an overall tax increase of almost 20 percent before considering the additional costs of Social Security.

This calculation artificially assumes that Medicare and Medicaid costs would remain the same even if GDP grows faster, which is highly unlikely for two reasons. First, the demand for health care tends to grow with income. Some studies suggest that health care expenditures grow even faster than income, all else equal.<sup>6</sup> Consequently, more rapid economic growth will undoubtedly raise the costs of Medicare and Medicaid programs. Second, providing health care is relatively labor intensive, so costs are especially sensitive to wages (Howe and Jackson 2007). Faster economic growth means faster wage growth, leading to higher costs for health care and higher costs for Medicare and Medicaid even if demand remains the same. More rapid economic growth is, therefore, very unlikely to alleviate the budget pressures emanating from Medicare and Medicaid. It will, in fact, make them worse if the demand for health care grows faster than incomes.

### **Social Security**

Social Security poses much less of a budget problem over the next two decades than do Medicare and Medicaid. Outlays will absorb only 1.8 percent more of the GDP in 2030 than in 2007. But even if the health cost problem is solved and the overall deficit problem around 2030 appears much less serious, Social Security is still left with a long-run actuarial problem. Revenues will fall short of promised benefits. The Social Security system's trustees estimate that it would take a 1.95 percent increase in the payroll tax to make the system solvent over the next 75 years, if there is no reduction in promised

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<sup>6</sup> See Hitiris (1997).

benefits. Assets held by Social Security trust funds—Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI)—are expected to be depleted in 2041 (Board of Trustees 2007).

Higher economic growth has two opposite effects on the financial health of the Social Security system. As wages rise, payroll and other tax revenues earmarked for the system grow more rapidly. However, the system's costs also grow more rapidly, because initial benefits automatically increase as wages rise. Tying benefits to wages reflects the philosophy that beneficiaries should share in the fruits of economic growth, so benefits should automatically grow as the living standard of the entire population grows. This practice tends to hold replacement rates constant.

Wage indexing is only used to calculate initial benefits. After a person starts to receive benefits, the amount received is tied to prices to protect retirees from inflation. Because current retirees do not share in the benefits of economic growth, faster growth will improve the financial health of the system, but only by a little bit. In the long-run, the wage indexing of initial benefits absorbs a large share of the extra revenues provided by added growth.

The Social Security trustees estimate what would happen if real taxable wages grow 0.5 percentage points per year faster than the rate projected in their base forecast (the “intermediate” path).<sup>7</sup> Assuming that total compensation per worker grows with productivity, real taxable wages could grow faster either because non-taxable fringes grow more slowly than assumed or because productivity grows more rapidly. I shall

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<sup>7</sup> The trustees provide three different projections based on different combinations of economic and demographic assumptions – a high cost or financially unfavorable path, an intermediate path, and a low cost or financially favorable path. This analysis focuses on the intermediate path. In the intermediate path, annual productivity growth is identical to CBO's 1.9 percent through 2013, but then gradually slows to 1.7 percent for the very long run.

assume that the 0.5 percent per year increase in real taxable wage growth is entirely due to higher productivity growth. An addition of 0.5 percentage points per year to productivity growth brings the rate very close to the unusually high rate experienced from 1950 to 1973.

A 0.5 percent increase in the annual rate of productivity growth reduces the 75-year actuarial deficit from 1.95 percent of payroll to 1.39 percent (or by 0.56 percent of payroll). Roughly speaking, it would be necessary to double today's 1.9 percent assumed rate of productivity growth to solve Social Security's long-run actuarial problem with economic growth. Although there have been short periods of such high productivity growth over the past five decades, it is totally implausible to believe that such growth could last over 75 years.<sup>8</sup>

Social Security's long-run actuarial problem gets more publicity than the overall budget's more immediate cash flow or deficit problem. This is a bit odd, because without reform, the budget's cash flow problem is likely to cause a financial crisis well before Social Security's trust funds are emptied. Huge budget deficits will likely provoke some sort of reform before the long-run actuarial problem becomes relevant.

The assumption of a 0.5 percentage point addition to the annual growth rate has only a small impact on the cash flow deficit experienced by the Social Security system in 2030. The trustees' assumptions imply a cash flow deficit equal to 1.3 percent of GDP. Raising productivity growth by 0.5 percentage points per year puts the deficit slightly above one percent of GDP.

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<sup>8</sup> Gokhale (2007) has shown that faster wage growth can actually worsen Social Security's actuarial balance if the actuarial balance is estimated using an infinite time horizon rather than the truncated 75-year horizon used by the trustees. This result requires that the decline in the ratio of workers to beneficiaries that is assumed for the next 75 years is continued for another 95 years. This may be quite unrealistic.

## **Indirect Effects of Economic Growth**

Even though it is implausible to argue that we can grow our way out of our long-run fiscal problems given current policies, would a faster rate of growth at least create a more hospitable climate for fiscal reformers? A more affluent society may be more willing to accept tax increases, although this notion is not supported by the historical record. The overall tax burden has varied over a limited range for the past 50 years, showing no discernible trend despite the fact that real GDP per capita has roughly tripled over the same time period. Whenever the burden crept above 19 percent of GDP, a significant tax cut has followed. It occurred when the Vietnam tax surcharge was quickly removed after 1969, when the Reagan tax cuts countered the tax-increasing effects of inflation in the early 1980s, and when the Bush tax cuts of 2001, 2002, and 2003 countered the effect of revenue growth far exceeding income growth in the late 1990s. It is true that when the Social Security trust funds threatened to run out of money in 1983, a significant part of the solution involved raising payroll taxes, but this occurred at the same time that the Reagan tax cuts had lowered the burden of other taxes to unusually low levels.

Faster growth may not make society more amenable to tax increases, but would it make people more tolerant of reductions in the growth of benefits? Again, the historical record is not supportive. As our society has become more affluent, we have expanded entitlement programs, not restrained them. Medicare and Medicaid were created in 1965; Social Security benefits were indexed to wages in the 1970s; and a new Medicare

prescription drug program was created in 2003. The growth of Social Security benefits was curbed in response to the crisis in 1983, but this may be the exception that proves the rule. The most important reform raised the full retirement age, but it had no effect for 17 years.

The nation cannot avoid changes in tax and/or spending policy indefinitely. Even though an improvement in living standards may not naturally bring about tax increases or entitlement restraint, it will make them less painful when such policies are finally adopted. The point can best be illustrated by examining the potential for reforming Social Security. In 2006, the average benefit paid out by the OASDI system was \$11,405, in 2007 dollars.<sup>9</sup> Because of wage indexing, the average inflation-adjusted benefit promised by current law is expected to rise to \$15,097 by 2030. In 2030, the costs of the system amount to 16.59 percent of payroll while the projected revenues are only 13.19 percent. Hence, the system could be balanced in that year by a 20.5 percent cut in all benefits. The average 2030 inflation-adjusted benefit would be \$12,002, still allowing for a benefit about 5 percent higher than that in 2006.

In other words, although today's payroll tax rate cannot finance the benefits promised for 2030, it can still finance an absolute increase in the inflation-adjusted benefit. That is possible because of the economic growth assumed by the system's trustees. If the growth rate turns out to be higher than the trustees assume, the percent cut necessary to balance the system would be lower and the implied absolute increase in the benefit compared to today's level would be higher. While growth doesn't help the fiscal problem (or helps only slightly), given the current design of Social Security, Medicare,

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<sup>9</sup> Based on the author's estimates. It is assumed that administrative costs equal one percent of total outlays. No provision is made for the tiny transfers (less than one percent) to the railroad retirement system.



and Medicaid, the necessary policy reforms would be less painful with faster growth. Growth does not substitute for reforms, but promoting higher growth will ease the sacrifices necessary to restore fiscal solvency.

Although a Social Security reform focusing entirely on benefit cuts need not reduce the living standards of the elderly below today's level, such a reform would imply that Social Security beneficiaries would enjoy a much smaller portion of the rewards from economic growth between now and 2030 than would wage earners. The necessary benefit cut can be reduced by raising the payroll tax burden, but then wage earners enjoy less of the fruits of economic growth.

The relationship is more straightforward between economic growth and the pain imposed by necessary Medicare and Medicaid reforms. The Medicare and Medicaid financing problem cannot be solved with tax increases. So long as the costs of the two programs rise faster than our income, it would take an ever increasing tax rate to solve the problem, which is not plausible. There is no escaping the fact that cost growth in the two programs must ultimately be brought down to income growth.

Currently, Medicare and Medicaid operate with open-ended budgets. The law specifies who is eligible for the programs and what treatments will be financed. Very few treatments are excluded. The government then pays the costs for whatever eligible treatments are demanded by the eligible population. Costs will not be controlled unless we take a very different approach to budgeting for the programs. To rein in costs, we need to limit the budget to a fixed amount, as Canada and the United Kingdom do with their national health care systems.

There are two very different approaches to achieving a fixed budget. The first could be based on providing vouchers to the populace, most probably income related, which people could use to purchase health insurance. Under the best scenario, market competition would improve the efficiency of insurance companies and ultimately of health care delivery. However, even if it did not, the budget would be fixed in theory, if not in political reality. An alternative approach would have the bureaucracy attempt to achieve a target rate of growth for the Medicare-Medicaid budgets by reducing the number of eligibles, limiting provider payments, or limiting the types of treatment that would be reimbursed. Regardless of the approach taken, the task of limiting budget growth to income growth will be less painful if the economy and incomes are growing more rapidly. Vouchers could then be more generous or bureaucratic rationing could be less severe.

### **Conclusion**

Faster economic growth cannot solve our long-run budget problems. Significant reductions in the growth of pension and health benefits or unprecedented increases in tax burdens are required. Faster economic growth should, however, make the reform process less painful. Economic growth leads to higher wages, and the extra payroll tax revenues would allow for a greater increase in Social Security benefits above today's level, even though they still must be reduced from promised levels. Faster growth also allows Medicare and Medicaid to finance a larger array of treatments while still keeping their budgets under strict control. More generally, a more affluent society will suffer less from higher tax burdens and slower benefit growth.

Alas, the politics of reform may not be eased by that fact. Some of the staunchest opponents of reforming the current Social Security and Medicare systems belong to the upper reaches of the middle class who could easily afford to pay more of their own way. Reform will be difficult in the best of circumstances and the longer we wait, the more difficult it will become.

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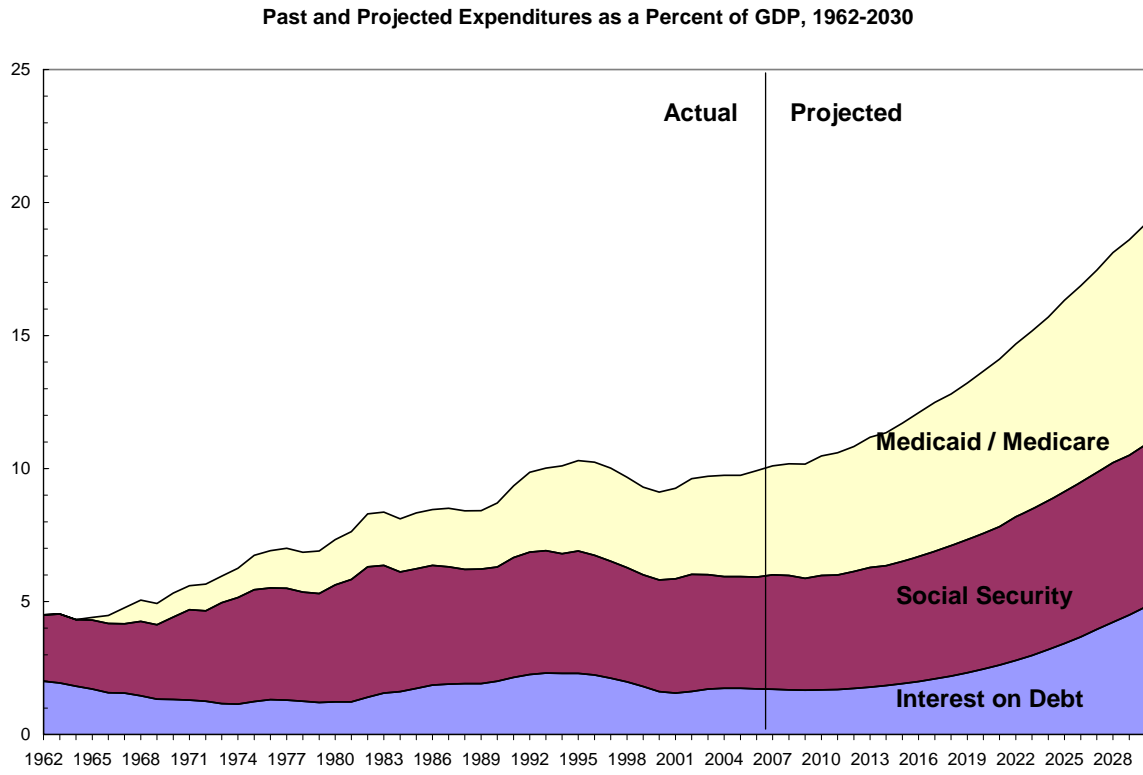
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## **Acknowledgments**

The author gratefully acknowledges support from the Rockefeller Foundation and Eric Lewis for his research assistance.

Figure 1



Source: CBO (2007b).