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## Graphically speaking

## Over the bridge into the next century: A look

by G. William Hoagland


The 1996 elections are finished. The 105th Congress has been sworn into office, and President Clinton begins his final political journey carrying the country to the next century. The Congress and the president have both committed to achieve a balanced federal budget by the year 2002. Balancing the federal budget, never easy, looks more doable than in the recent past. But just as Ulysses was attracted by the sirens' call, the attractiveness of balancing the budget by 2002 masks serious dangers that lie ahead in the new century.

## Debt-to-GNP ratios: future shock

In 1996 the federal government's spending exceeded its receipts by $\$ 107$ billion. The country's annual deficits must be financed by borrowing. Cumulatively, since the beginning of the republic, the federal government has borrowed $\$ 3.7$ trillion from the public to fund its deficit spending.

Measured against the size of the nation's economy, the $\$ 3.7$ trillion debt held by the public represented 50 percent of gross national product (GNP) in 1996. Since 1790, the country has let its debt exceed 100 percent of GNP for only a brief period during World War II. The ratio declined after the war and the ratio has never risen significantly during peace and prosperity until the early 1980s (figure 1).

Based on Congressional Budget Office long-term simulations prepared for the Senate Budget Committee, the ratio of debt-to-GNP early in the next century is bleak.

Factors combining to accelerate the debt burden are

- Demographics. Between 1990 and 2030, the proportion of persons over sixty-five will nearly double while the number of working-age persons will increase only 25 percent. Today there are nearly five persons working for every retired person; by 2030 that number is expected to drop to less than three.
- Growth in health care costs. There will be more elderly and they will live longer. Expenditures per beneficiary of Medicare and Medicaid will grow at rates well above inflation-in excess of 10 percent annually over the next decade.
- Labor and productivity. Because of the demographic changes, annual growth in hours worked will decline from 1.6 percent recently to less than 0.1 percent by 2030. Total factor productivity (growth not attributable to either capital or labor) is assumed to grow at 0.7 percent per year, its average pace from 1952 to 1989.
- Capital and interest rates. The effects of growing deficits and debt crowd out domestic capital investment, which slows the economy and raises interest rates. This in turn leads to slower revenue growth and higher borrowing costs, which produces still larger deficits and sets off a vicious and unsustainable fiscal chain reaction.


## The bleak future

Figure 1 depicts an explosion of debt to GNP in the first half of the next century resulting from factors named above (base scenario II). By the year 2030, debr held by the public would reach nearly 300 percent of GNP-nearly six times the ratio of today and more than tripling in just the fifteen years between 2015 and 2030.

Even varying the assumptions of demographics and productivity, lines I and III in figure 1, the results remain ominous. The two scenarios were defined so that two-thirds of the 750 alternative simulations fall between them. Therefore, the probability of an outcome better than scenario III is about 15 percent, and the probability of an outcome worse than I is 15 percent.

Figure 2 converts the three scenarios into a GNP per capita measure (chained 1992 dollars). All three scenarios show how an explosion in the debt ratio will lower our standard of living in the future. Under the base scenario, the rate of growth in real per capita GNP begins to slow dramatically beginning in 2010 and actually declines after 2020.

## Needed policy action: a true dilemma

Two alternatives, (a) permanently balancing the federal budget or ( $b$ ) balancing only the primary deficit (revenues minus noninterest spending) to stabilize the ratio of debt to GNP at about 50 percent, could redress the bleak economics portrayed. Under either alternative, significant
policy changes would be required in entitlement spending on the elderly, in tax policies on working Americans, or a combination of both.

These two alternatives could prevent the federal debt from growing faster than the economy. Permanently balancing the federal budget, including the annual interest payments on the deficit, would, over time, result in the debt-to-GNP ratio declining to 14 percent by 2030. This low a ratio would be unusual in modern economic history, but also would result in nearly a 25 percent increase in per capita income compared to the base scenario.

The alternative of stabilizing the debt-to-GNP ratio at 50 percent permanently would still result in annual deficits of nearly 2.0 percent of GNP; however, compared to the base scenario, per capita income would also be nearly 23 percent higher by 2030.

How the nation chooses between these two alternatives remains unclear. But it is clear that our current budget policies are unsustainable and that the long-term imbalances cannot be resolved without taking significant action soon.

## For more information

More details of the assumptions and economic simulations discussed in this article are available in chapter 4, "The Long-Term Budget Outlook," in Economic and Budget Outlook: Fiscal Years 1997-2006, published by the Congressional Budget Office, May 1996.

