



## Budget Deficits and Interest Rates

Edward Nelson

**O**n February 2, 2004, President Bush released his budget proposals for fiscal year 2005, along with an estimate of the 2004 budget deficit of \$521 billion. The return of substantial deficits has reignited debate on the implications of budget deficits for the economy.

Warnings about the consequences of U.S. budget deficits, while not new, have shifted in emphasis over time. During the 1970s, emphasis was on the *inflationary* consequences of deficits. For example, in 1975, Ronald Reagan stated that inflation “has one cause and one cause alone: government spending more than government takes in.” By contrast, the concern voiced since the 1980s about deficits rests on the argument that they put upward pressure on *real interest rates*.

Deficits can be a source of inflation if they are accommodated by monetary policy—that is, if higher deficits provoke an increase in money growth. This can occur if the securities issued by the government to finance deficits are purchased by the central bank. It also occurs if the securities are sold to the private sector, but the central bank then attempts to offset any resulting upward pressure on interest rates. Under either scenario, the occurrence of deficits leads to greater money growth, creating excess aggregate demand and inflationary pressure.

The present-day emphasis on the implications of the deficit for interest rates, and not inflation, reflects an expectation that the Federal Reserve will not accommodate deficits with money creation, but instead will allow nominal and real interest rates to rise to whatever levels are consistent with keeping aggregate demand and inflation under control. This expectation reflects the experience since 1982, during which inflation has been controlled despite several years of high deficits (including fiscal year 1983’s \$208 billion deficit of approximately 6 percent of GDP, above the 4.5 percent estimated for 2004). This experience confirms that monetary policy is capable of keeping inflation low even in the face of large changes in the government’s budgetary position.

To see how deficits might matter for interest rates, it is useful to remember that nominal interest rates are the sum of an expected inflation component and a real rate of return.

A non-accommodative monetary policy stance implies that the expected-inflation component of nominal rates will be unchanged in the face of higher deficits. But it also implies that monetary policy will not resist any upward pressure on real interest rates that arises from greater government borrowing.

Why might real interest rates rise in response to deficit financing? With monetary accommodation of the deficit ruled out, the government needs to induce the private sector to increase its subscriptions to government bonds. If the private sector’s volume of saving has not increased one-for-one with the higher deficit, extra government borrowing must take place at the expense of the financing of private projects, such as investment in residences or factory equipment. Real interest rates rise as the government attracts funds away from these sources. The higher interest rate has the effect of reducing the private sector’s demand for capital, which is thus brought down in line with the reduced supply of saving available for private use. The lower private capital accumulation underlies what Douglas Holtz-Eakin, the director of the Congressional Budget Office, has summarized as a “modestly negative” effect of budget deficits on long-term economic potential.

Much empirical evidence for the United States has found little relation between deficits and interest rates. However, a recent study<sup>1</sup> does detect a “statistically and economically significant” relationship between higher deficit projections and expected future long-term interest rates, after controlling for other factors that determine real interest rates, including the long-term rate of economic growth. According to the author’s estimates, an increase in the projected deficit-to-GDP ratio of 1 percentage point “raise[s] long-term interest rates by roughly 25 basis points.” These estimates suggest that if the deficit-to-GDP ratio were sustained at present levels, the eventual result would be real interest rates 1 percentage point higher than would prevail under a balanced budget. ■

<sup>1</sup> Laubach, Thomas. “New Evidence on the Interest Rate Effects of Budget Deficits and Debt” Finance and Economics Discussion Series Paper No. 2003-12, Board of Governors of the Federal Reserve System, May 2003.