

Economic Commentary

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Why Do Deficits Matter ?

by William T. Gavin

The current budget process is likely to produce large budget deficits in fiscal year 1982 and thereafter. The budget deficit is the residual from the taxing and spending policies of the federal government. Our founding fathers gave the government the power to borrow money in article 1, section 8, of the U.S. Constitution. Without such authority the government would be forced to collect taxes prior to making expenditures. Economic theory and empirical evidence suggest that it is in the interest of the people and in the self-interest of political leaders to plan tax collections independently of ex-

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penditures. In such a budget process there is obviously room for temporary deficits.¹

The persistent and large deficits of recent years, however, have spawned intense debate about the effect of government borrowing on monetary policy and inflation. Calls for a constitutional amendment to require a balanced budget indicate that some observers believe the danger of inflation posed by large and persistent deficits outweighs the benefits of a flexible fiscal authority.

In the past we often have heard opponents of proposed federal programs claim that funding these programs would cause a deficit that would lead to inflation. Today, in an apparent contradiction, many of these same

1. For a rigorous development of this theory, see Robert J. Barro, "On the Determination of the Public Debt," *Journal of Political Economy*, vol. 87, no. 5, part 1 (October 1979), pp. 940-71.

ment securities, because it pays for the debt by increasing bank reserves. This in turn can lead to more bank lending, more money in circulation, higher demands for goods and services, and an accelerating inflation rate as both private and public sectors compete for the same resources.

This problem is complicated, because all of this takes time. If inflation followed immediately on an excessive increase in bank reserves, interest rates would rise immediately to reflect the higher inflation rates, and it would not be possible for the Federal Reserve to prevent interest rates from rising by purchasing government debt. However, it takes time for an increase in bank reserves to work its way through to a higher inflation rate. During that transition period interest rates will be below their long-run market-clearing levels.

The opposite happens when the trend in money-supply growth is lowered. Bank reserves are reduced immediately, shrinking the supply of credit available. Lower growth in bank reserves will lead to less lending, less money in circulation, a lower demand for goods and services, and a decelerating inflation rate. But this also takes time. During the transition period interest rates will be above their long-run market-clearing levels.

Today's high interest rates reflect a reduction in the growth of bank reserves without a reduction in the underlying inflation rate. Interest rates are high, and the existence of a large budget deficit only makes interest rates higher. Increasing bank reserves to reduce interest rates could offer some short-term relief, but it would be self-defeating; faster growth in bank reserves eventually

would lead to even higher inflation and higher interest rates.

The deficit also matters to the monetary authorities for a technical reason related to the process described earlier. The amount of interest-bearing debt outstanding can have an effect on inflation (the inverse of the value of money) if it is perceived that the taxing potential of the government is being strained and that interest-bearing debt is likely to be redeemed by inflating the money supply. In this case, deficits will raise inflation expectations and slow the adjustment process needed to end inflation.

The Federal Reserve has adopted a monetary-growth rule intended to guarantee that deficits will not be financed. Most economists would agree that the steady growth rule is a reasonable if not optimal long-run policy. On the other hand, there is no well-accepted economic theory ensuring that it is reasonable or optimal to force the money supply to grow at the long-run constant rate in the short run, i.e., week-to-week or even month-to-month. But to maintain credibility and change expectations, the Federal Reserve must convince the public that it will not overshoot its long-run targets. One way to do this is to adhere to the long-run targets even in the short run. The presence of large deficits makes it more difficult to convince the public that the Federal Reserve System will not finance those deficits and places pressure on the System to adhere even more closely to its long-run targets in the short run.

From a technical point of view, this is a relatively simple task. It becomes complicated, however, because the central bank

is the largest trader in the money market and appears to have control over interest rates. During periods of disinflation policy, all the adjustment costs will be attributed to high interest rates and the central bank. Political coalitions will be formed by sectors in the economy that are most sensitive to high interest rates. These coalitions will often be strong, having benefited from the inflationary policies of the past. They will put pressure on the Federal Reserve to revert to an inflationary policy—although it will be called a low interest-rate or a low-unemployment policy.

Conclusion

Deficits can cause inflation when they are financed by excessive growth of the money supply. However, the Federal Re-

serve sets growth-rate targets for the money supply that do not depend on the size of the deficit or on interest rates. These targets are intended to be low enough to reduce inflation and interest rates in the long run, although they may require higher interest rates in the short run. Large budget deficits have to be financed in credit markets, because the Federal Reserve cannot buy large amounts of government debt without creating excess bank reserves and above-target money growth. Given the money targets, a larger budget deficit will require higher interest rates to reduce private borrowings enough to float the extra government debt.

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voices are calling for tax cuts that, even allowing for supply-side stimulus, would be likely to produce even larger deficits. A closer look at the deficit and its relation to inflation and monetary policy may clarify the issue.

What Is the Deficit?

The deficit is simply the difference between the dollar amount that the federal government collects in taxes and the dollar amount that it spends on goods, services, and transfer payments. Temporary deficits are desirable under some circumstances, because they allow the government to plan a different path for expenditures than for tax collections. If we assume that taxpayers prefer tax rates to be fairly constant over time, then the government will issue debt when there is a temporary increase in government spending or when there is a temporary decrease in income.

During a war the federal government usually floats a large amount of debt to finance the rapid buildup of the military sector. Taxes are raised, but not by enough to pay for the war. During World War II, for example, deficits of the federal government exceeded 50 percent of expenditures. In 1946 the level of government debt stood at \$241.9 billion, equivalent to 115 percent of GNP. By 1963 federal debt, although larger in absolute size, had fallen to 43 percent of GNP, equal to the prewar percentage of 1940. In 1980 the debt was \$715.1 billion, or 27 percent of GNP.

Governments, like private firms, are likely to issue debt to finance capital investment. When a government builds schools,

roads, canals, or buildings, the costs are large and immediate; the benefits, however, accrue slowly over a long period of time. By issuing debt and smoothing tax rates over time, the government not only minimizes costs of tax collection but spreads the tax payments to future generations that benefit from the investment projects.²

A government also may issue debt when tax collections fall during recessions. Institutional arrangements, such as unemployment compensation, welfare programs, and an income-sensitive income-tax structure, often cause government spending to rise when incomes and tax collections are falling. Given our assumption that taxpayers want to smooth tax rates, the taxpayer would prefer that the government issue debt rather than raise tax rates to finance the extra spending.

Viewed in this context, the desired deficit generally will rise whenever government spending rises above its long-run trend or whenever income and tax collections fall below their long-run trends. To determine whether a deficit is desirable, we have to know the expected trends in income and government expenditures as well as the duration and the cumulative size of the

2. While debt issue may arise from public-investment programs, this is not likely to be a reason for federal budget deficits in the United States. Debt issue is more common at the state and local levels, because an investment project is likely to be very large relative to the budget. This article examines the relationship among federal budget deficits, inflation, and monetary policy. Since the Federal Reserve does not conduct open-market operations in state and local government debts, the deficits of state and local governments are not likely to be a major factor in determining inflation or inflation expectations.

departure from trend. This determination becomes complicated if the underlying trends change.

Suppose that the level of government spending is going to be lowered at some known time in the future, so that the expected long-run trend in government spending becomes lower. Tax rates will begin to be lowered immediately but only gradually. Current levels of government spending will be seen as a temporary departure above trend, and partial debt issue will be chosen in the optimal finance policy.

All of the past federal budget deficits, however, did not result from war, investment in public goods, or the business cycle. Ex post, these deficits appear to have resulted from a political process that has used the borrowing authority to prove government services without direct taxation. In general, these deficits had to be financed by borrowing or by inflating the money supply.

Inflation today is the result of slowly accelerating money growth that occurred over a period that also included large and persistent budget deficits. In each year the deficit represented the provision of government services for which there was no explicit tax liability. A little extra money growth in each year had no visible connection with that year's deficit and no visible impact on inflation. Only when each year's excess was accumulated over a longer period of time did the long-run effects occur.

The discussion so far takes the actual level of government spending as optimal. All government spending "crowds out" private spending to some degree. When taxes are raised to pay for spending, the

effect is obvious. When the government borrows money, the "crowding-out" effect is obvious only if the Federal Reserve does not inject extra credit into the banking system. If the Federal Reserve does not add credit to the banking system, then interest rates will rise immediately, forcing marginal private borrowers out of the market as well as inducing more people to save. If the Federal Reserve adds credit to the banking system, interest rates may not rise immediately, but the government's demand for goods and services will compete with private demand to force prices up, thus reducing incomes as surely as if taxes had been raised. If the deficits and accommodating monetary policy persist, inflation will accelerate, and interest rates will rise.

If the Federal Reserve follows a non-inflationary policy, government borrowing will lead to higher interest rates and the crowding out of private investment and consumption loans. Whether the level of government spending is too high or too low depends on the value of the government's marginal product relative to the value of the private-sector's marginal product. In general, the value of marginal production to consumers from a particular sector falls as output rises. That government-sector output has been growing relative to private-sector output for 100 years suggests that many who argue against deficits may actually be arguing against more government spending. They judge the value of marginal government production to be low relative to private-sector production.

An evaluation of the deficit depends on judgments about the appropriate level of government spending. If government-pro-

duced goods and services were priced and sold in competition with privately produced goods and services, this evaluation would be the result of the collective judgment of buyers; yet most government output is not suited for this market test. Instead, we rely on the political process to reflect the evaluations of individual citizens. Their judgments, in turn, depend on values that will differ with each individual. Those who place a high value on government programs may support temporary deficits that occur because of increased spending that enlarges the public sector. Those who place a low value on government programs (relative to private output) may support temporary deficits if they result from tax reductions that are meant to reduce the role of the public sector.

The Deficits and Monetary Policy

Why the deficit matters to the monetary authorities can be seen by looking at the conflicting promises made by government officials. A stable trend in the past may be thought of as an implicit promise to continue the trend in the future. A trend toward higher government expenditures suggests promises of more government services in the future. Promises also are made not to raise taxes. Persistent deficits occur if both promises are kept. Government services are provided, and taxes are not raised to pay for them. The government then borrows the difference in the credit market.

But government debt represents another promise—an implicit promise to repay the debt in full. The debt can only grow if more lenders (savers) can be found to forego current consumption. As the government

tries to borrow more and more, a higher interest rate must be paid to induce more people to give up consumption in the current period or to force out private borrowers at the margin.

The Federal Reserve is one lender in the economy that seemingly can buy government debt without requiring anyone to give up current consumption. When interest rates are very high, it might seem tempting for the government to sell its debt directly to the Federal Reserve; this would take the immediate pressure off the credit markets, and interest rates would not have to rise further.

However, the Federal Reserve Act prohibits the Federal Reserve System from buying debt directly from the U.S. Treasury except in very limited amounts. Therefore, the question is whether the Federal Reserve might be willing to acquire enough additional government debt in the open market to absorb the equivalent of the current deficit.³

Part of the government's promise to repay the debt in full is its commitment to maintain the value of the currency. Under the current paper standard, the dollar is valuable because the U.S. government (of which the Federal Reserve is an independent agency) promises to limit the quantity of money in circulation. A problem can arise when the Federal Reserve buys govern-

3. In fact, since 1965, the Federal Reserve has bought as little as 2 percent and as much as 150 percent of the annual growth of Treasury debt. Since the Accord of 1951, the general presumption has been that the Federal Reserve's objectives were more general than financing Treasury debt. They encompass the need for a flexible but noninflationary monetary policy.