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The Burden of Reagan Debt

During the Reagan Administration the national debt nearly tripled. Will this debt be a burden on future generations? Or did Reagan fiscal policy so enhance productivity that future generations actually may be better off? This *Letter* addresses this issue using a medium-scale econometric model of the U.S. economy to simulate the economic effects of Reagan fiscal policy. This model is described in the *Federal Reserve Bank of San Francisco Working Paper,* No. 89-01.

The rise in debt

Immediately upon taking office in 1981, President Reagan presented to the Congress a program to counter the high inflation and low productivity growth that existed at the time. This program called for reductions in personal tax rates and business taxes to spur saving and investment, spending cuts to curtail the size of government and reduce the budget deficit, reductions in the burden and intrusion of federal regulations, and a new commitment to a stable monetary policy.

Another important priority of President Reagan was to step up the increases in defense spending that had begun under President Carter. To offset these spending increases, President Reagan sought substantial cuts in nondefense-related federal spending. Although Congress went along with the tax cuts, it resisted any significant spending cuts in nondefense areas. Consequently, the spending side of the budget did not work out as planned by the Administration.

Instead, the federal budget deficit as measured on a high employment basis rose from an approximately balanced position in 1980 to four percent of GNP in 1986. The share of tax receipts in GNP dropped about one percentage point, and federal spending on goods and services and federal transfer payments rose by three percentage points of GNP. Then, between 1986 and 1988, modest cutbacks in spending on goods and services and increases in taxes reduced the deficit to a more moderate 2.4 percent of GNP.

Impacts of Reagan fiscal policy

Whether the Reagan fiscal program ultimately placed a burden on future generations is a matter of debate. One widely held view is that it was counter-productive to the original goals of higher saving and investment. According to this view, the lower tax rates did not increase personal saving, but instead stimulated consumption, while the larger budget deficits "crowded out" at least some productive investment in the private sector. And because little of the increase in government spending was for investment, the overall effect of the Reagan program was to reduce the capital stock relative to what it otherwise would have been, thereby reducing productivity, real wages, and real GNP for future generations.

Proponents of this view recognize that the Reagan fiscal program attracted significant capital inflows from abroad, which reduced the extent to which the budget deficits crowded out private investment. However, they argue that it was the higher interest rates associated with increased government borrowing that attracted the foreign capital. Consequently, these inflows of funds created a burden on future generations because the government generally did not use the money to create a larger capital stock that would generate higher future income to service the higher foreign debt.

An alternative interpretation of the inflow of foreign capital is that it occurred in response to enhanced business investment opportunities created by the Reagan fiscal program. According to this view, because the Reagan program involved significant deregulation and the Tax Act of 1981 included tax cuts for the business sector, the Reagan program stimulated business investment. Indeed, the accelerated depreciation provisions contained in the 1981 Tax Act reduced the effective tax rate on business investment in equipment from 13 percent in 1980 to only one percent in 1985 and the rate on business investment in structures from 62 percent to 39 percent.

Although the Tax Reform Act of 1986 raised the tax rate on equipment back to 14 percent, it also reduced the tax rate on structures further, to 29 percent. Moreover, because of possible efficiency gains from the 1986 Act, the productivity of investment could have increased, raising both the economy's current output and its capacity to produce in the future.

Proponents of the first view argue, however, that business investment could have been discouraged if the rise in market interest rates due to increased government borrowing had outweighed the effect of a lower effective tax rate on the cost of capital for business investment.

Moreover, they point out that the decline in marginal income tax rates for households probably discouraged investment in residential structures and other consumer durables by the household sector. The Tax Act reduced the top marginal rate from 70 percent to 50 percent, and the marginal tax rate of the average individual from 30 percent to a current value of 23 percent. Because interest payments are tax deductible, a lower marginal income tax rate produced a higher after-tax interest rate, raising the cost of capital for households. So, while the effect of changes in the tax code on the cost of capital may have encouraged business investment, it discouraged household investment.

Measuring the effects

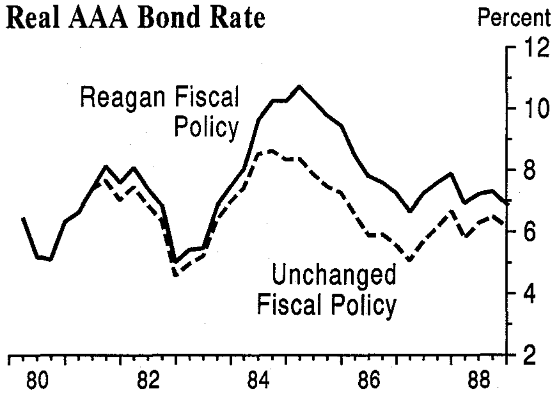
Reagan fiscal policy could have been beneficial to future generations if the increase in indebtedness to foreigners had been matched by a large enough increase in the capital stock. But if the policy caused foreign debt to rise and the capital stock to fall, there would be a burden on future generations. To measure the effects of Reagan fiscal policy, an econometric model was used to simulate what would have happened to the economy without the Reagan fiscal revolution. In the model, investment is significantly affected by various taxes, and household consumption depends on current and past income, as well as on wealth. Compared to alternative theories, the hypothesized consumer behavior is particularly well supported by the data from the 1980s.

In this simulation all federal tax rates were held constant at their 1980 values, and federal government spending was allowed to grow only as fast as the model's estimate of the economy's productive capacity. The latter estimate was not significantly affected by Reagan fiscal policy. The difference between this simulation assuming neutral fiscal policy and another simulation that assumed actual fiscal policy is then the measure of the impact of Reagan fiscal policy.

In the simulation, monetary policy was assumed to be conducted so as to achieve the same path for the unemployment rate as actually occurred. In practice this would not have occurred exactly. But since the goal of the Reagan Administration and the Federal Reserve was to reduce the rate of inflation from double digits to more moderate levels, monetary policy would have been fairly restrictive in any case, resulting in an unemployment rate close to its actual level during the period, regardless of the stance of fiscal policy.

The results of this simulation suggest that although the Reagan program reduced taxes to stimulate investment, it also raised real interest rates as a result of the increase in federal borrowing. As shown in Chart 1, under the neutral, or unchanged, fiscal policy, the real bond rate would have been one to two percentage points lower than it actually was. (Of course, the nominal level of the yield on Aaa-rated corporate bonds declined in the 1980s as the inflation premium in interest rates declined, but the real rate rose.)

Chart 1
Real AAA Bond Rate



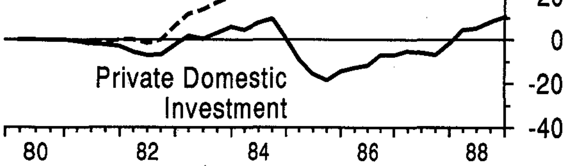
The model allows us to investigate the impact of lower taxes and higher real interest rates on the three main investment sectors of the economy. First, the net effect of Reagan fiscal policy on total residential investment was to reduce it. In the case of owner occupied housing, lower marginal tax rates and higher interest rates both worked to discourage housing investment by raising the after-tax cost of housing capital. For rental housing, the effective tax rate on new investment on balance went down, but higher real interest rates discouraged investment here as well.

The story is similar for household spending on consumer durables. Both the tax effects and the interest rate effects of Reagan fiscal policy worked to discourage consumer spending on durables, and the simulation confirms that without Reagan fiscal policy consumer spending on durables would have been higher.

In contrast, the simulation shows that the tax incentives for nonresidential fixed investment were strong enough to offset the effect of higher real interest rates by a small margin. Thus, Reagan's fiscal expansion acted to raise business fixed investment somewhat.

Taking these three investment sectors together, the cumulative reduction in investment in housing and consumer durables exceeded the cumulative stimulus to nonresidential investment over the period from 1981 to 1988 by $20 billion in 1982 dollars, based on the results presented in Chart 2. In other words, Reagan fiscal policy is estimated to have reduced the capital stock by $20 billion, implying that the Reagan budget deficits were partially financed by a crowding out of private domestic investment.

Chart 2
Effects of Reagan Fiscal Policy



The remaining portion of the budget deficits were financed by foreign investors. As we have seen, Reagan budget deficits put upward pressure on real interest rates in the United States. These, in turn, attracted capital from abroad which was used either directly or indirectly to finance the higher level of government borrowing. Net capital inflows would have increased even with an unchanged fiscal policy because of the strong growth of the U.S. economy as it pulled out of the 1982 recession. But by 1988 Reagan budget deficits had increased annual net capital inflows by nearly $90 billion in 1982 dollars, also shown in Chart 2. Thus, the effect of Reagan budgetary policies was to add $90 billion of indebtedness to foreigners in peak years, and lesser amounts in other years, without increasing the domestic capital stock so as to provide any more income to service this debt.

Burden on future generations

Cumulating the total effects through 1988, we arrive at a total burden on future generations of $390 billion in 1982 dollars, of which $20 billion is the reduction in the capital stock and $370 billion is the increase in indebtedness to foreigners. This is equal to 9½ percent of the nation's current output, or $2,762 current dollars for every member of the adult population. This is what it would cost for the current generation to eliminate the burden on future generations by restoring the lost capital stock and paying off the foreign debt that has been incurred.

Alternatively, future generations will have to pay the interest on this burden—in the form of reduced output and consumption, as well as actual interest payments to foreigners. At a current real bond rate of approximately six percent, that would come to a payment of $165 per year in current dollars for every member of the adult population, forever.

Of course, there was also a benefit associated with the Reagan fiscal revolution—namely, higher consumption for the current generation. But this tradeoff would be worthwhile only if, in fact, we wished to better our own economic welfare at the expense of future generations. To begin to reverse this intergenerational inequity, the Bush Administration has proposed running budget surpluses by the mid-1990s.

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