The Deficit and the Debt

The two primary tools of discretionary fiscal policy are government spending (G) and taxes (T). When government conducts expansionary fiscal policy to counteract recession, G increases and/ or T decreases. When G increases and/or T decreases, the government budget moves toward deficit. A budget deficit occurs when the government spends more than it collects in taxes and borrows to cover the difference. It does this by issuing bonds. The sum of past deficits is the debt. The debt incurs annual interest charges.

When the government conducts contractionary fiscal policy to alleviate inflationary pressures, G decreases and/or T increases. When G decreases and/or T increases, the government budget moves toward surplus. A budget surplus happens when the government taxes more than it spends. The surplus can be used to reduce the debt.

The effect of government borrowing can be modeled using the loanable funds market. A government budget deficit results in an increase in the demand (D) for loanable funds. A budget surplus reduces the demand for loanable funds. It results in an increase in the supply (S) of loanable funds if government pays off the debt.

1. Complete Table 5-6.1. Circle deficit or surplus, and in the other columns place an up arrow for increase, a down arrow for decrease, or NC for no change.



Table 5-6.1

Budget Effects of Fiscal Policy

| Fiscal policy | Tools of fiscal policy | Effect on government's budget | Effect on debt | Effect on loanable funds market | Effect on real interest rate |
|----------------|------------------------|-------------------------------------|----------------|---------------------------------------|------------------------------|
| Expansionary | G T | Deficit / Surplus | | D S | |
| Contractionary | GT | Deficit / Surplus | | D S | |

The central bank of a country can counteract the effect of budget deficits on the real interest rate by conducting an open market purchase of government securities. When the central bank purchases the securities directly from the government, this is referred to as monetizing the debt and is seen as highly inflationary. The effect of an open-market purchase of government securities can be modeled using the money market.

2. Draw a graph of the money market showing how an open-market purchase of government securities affects the nominal interest rate.

3. How would the change in the nominal interest rate affect the real interest rate? Explain.

4. Why is monetizing the debt inflationary?

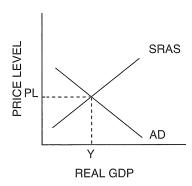
Crowding Out

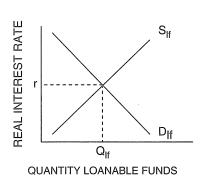
Expansionary fiscal policy increases aggregate demand and moves the budget toward deficit. If deficit spending is financed through borrowing, the government will demand loanable funds. The government's demand for loanable funds ($D_{\rm lf}$) added to the demand for loanable funds by private borrowers. Thus expansionary fiscal policy increases $D_{\rm lf}$ and may cause interest rates to rise. Because the government is borrowing money to finance its expansionary fiscal policy, consumers and businesses will be "crowded out" of financial markets. If consumers and businesses are not able to borrow to finance spending, it will lead to a decrease in aggregate demand (AD).

Crowding out occurs when the government borrows to pursue expansionary fiscal policy and such government borrowing replaces private borrowing and spending. Because some private borrowing and spending is "crowded out" of the economy, part of the increase in aggregate demand from increased government spending (and/or decreased taxes) is offset by a decrease in aggregate demand from decreased consumption and investment as interest rates rise.



Figure 5-7.1 **Crowding Out**





- 1. Assume fiscal policy is expansionary and the government funds the resulting deficit through borrowing. In Figure 5-7.1, shift one curve in each graph to illustrate the effect of the fiscal policy, and label the new equilibrium values.
- 2. How will the change in the equilibrium interest rate in the loanable funds market affect the short-run aggregate supply (SRAS) curve in the long run? Show on the AS/AD graph above, and explain.