

## Chapter 20. Deficit finance

Borrowing is an important method of government finance. The deficit during a time period is the excess of spending over revenues. If revenues exceed expenditures, there is a surplus. Because you need to take in account all revenues and expenditures, you should include the on-budget deficit (on-budget activities) and the off-budget deficit (off-budget activities) to arrive at the total deficit. The debt at a given point is the sum of past deficits and surpluses.

Official figures concerning the size of government deficits, surpluses and debts must be viewed with caution for several reasons:

- The state and local governments also have large amounts of debt outstanding.
- Inflation erodes the real value of the debt. The official deficit/surplus does not reflect this fact.
- The federal government lumps together capital (durable items) and current (consumed within the year) expenditures. Standard accounting procedures require that only annual depreciation of durable assets be included in the expenditures, not their entire purchase price.
- Tangible assets owned by the government should also be taken into account.
- Government's implicit obligations to pay money in the future should also be considered.

Because the legal burden of debt is on future generations, it doesn't mean that they bear the real burden. There are different views on this issue:

### *Lerner's view*

If you assume that the government borrows from its own citizens the obligation is an internal debt, it creates no burden for the future generation. Members of the future generation simply owe it to each other (intragenerational transfer).

If the government borrows from abroad (external debt), the future generation bears a burden. To the extent that the project's return is less than the marginal cost, the future generation is worse off. In Lerner's model a generation is defined as everyone who is alive at a given time.

### *Overlapping generations model*

If you define a generation as everyone who was born at about the same time, several generations coexist simultaneously. In this model, debt finance can produce a real burden on future generations. By comparing the net taxes paid by different generations, one can get a sense of how government policy distributes income across generations (general accounting).

### *Neoclassical model*

When the government initiates a project, whether financed by taxes or borrowing, resources are removed from the public sector. If you assume that when the government borrows, it competes for funds with individuals and firms who want the money for their own investment projects (crowding out hypothesis – private investment get crowded out), debt finance leaves the future generations with a smaller capital stock. The debt imposes a burden on future generations in this way.

### *Ricardian model*

Voluntary transfers across generations undo the effects of debt policy, so that crowding out does not occur and tax and debt finance are essentially equivalent. The form of government finance is irrelevant.

Several factors influence whether a given government expenditure should be financed by taxes or debt. The benefits-received principle states that the beneficiaries of a particular government spending program should have to pay for it.

If a project will benefit future generations, then having them pay for it via loan finance is appropriate. To analyse whether debt or finance tax generates a higher excess burden, you must realize that every increase in government spending must ultimately be financed by an increase in taxes.

It is just a choice between the time of the taxes. With debt finance, many small payments are made over time to finance the interest due on the debt.

As we still know, the excess burden increases with the square of the tax rate. When the tax rate doubles, the excess burden quadruples. If you look at it this way, it seems that a series of small tax increases generates a smaller excess burden than one large tax increase. However, this conclusion ignores the possibility for the crowding out effect. If crowding out occurs, the conclusion may be reversed.