Practice Problems: Fiscal Policy and Deficits

Econ520. Fall 2021. Prof. Lutz Hendricks. September 10, 2021

Blanchard / Johnson, Macroeconomics, 6th ed., ch. 23

1 The government budget constraint

The budget constraint states: present value of taxes = present value of spending + initial debt. You should be able to explain what this implies:

1. why debt can grow without ever being repaid;

2. why stabilizing debt requires primary surpluses;

3. why changing the timing of tax collection does not affect its present value (which suggests Ricardian Equivalence may kick in);

4. why a current tax cut must be followed by a future tax increase or spending cut of equal present value;

5. why R versus g is a key question (are interest rates larger or smaller than output growth rates?)

2 Effects of public debt

1. Explain risks associated with high levels of government debt:

   (a) rising interest rates on government (a positive feedback loop);
   (b) higher inflation
   (c) currency depreciation

   For some of these risks, the answer depends on whether the government borrows in its own currency or in foreign currencies.

2. Suppose the Euro Zone forgives a large chunk of Greek debt. How would this affect output, interest rates, investment, etc in the short run and medium run. Use an AS/AD diagram.

   A: We really should use an open economy model for this, but here is an approximation. The government can permanently cut taxes without cutting spending. This follows from the government budget constraint. Effectively, this is a fiscal expansion. AD shifts right. Short-run Y rises.

   What this analysis gets wrong: interest rates rise in response to a fiscal expansion, but not in response to debt forgiveness. What is missing is the increase in public saving associated with debt forgiveness. A limitation of our model is to not keep track of the stock of public debt.

3. How would the answer change if the debt forgiven was owned by domestic households rather than foreigners?

   A: Now we get an additional wealth effect, which reduces consumption. If Ricardian Equivalence holds, the net effect is 0! It's just putting money from one pocket into another.

   This is an important and somewhat subtle point. Government debt that is held by domestic residents is a promise to pay yourself. This is fundamentally different from a promise to pay foreigners who hold our bonds.