EC1010: Tutorial Questions 9

April 3, 2010

1. Suppose that current tax rates in Ireland are at the level that maximize tax revenue today and in the future. According to the government budget constraint, what *must* happen in the future as a result of large expenditures on NAMA and bank bailouts today?

2. Mention one way the Irish government could eliminate its *structural* budget deficit. As the Irish economy recovers, what will happen to the *cyclical* (or cyclically-adjusted) deficit? What effect do *automatic stabilizers* have on the cyclical budget balance?

Unless otherwise stated, in all of the following questions, assume the economy starts off at potential output. To find the short-run equilibrium, make the appropriate shifts to the curves (e.g., if the nominal exchange rate depreciates, then the aggregate demand curve shifts outwards), and find the intersection of the AD and SRAS curves. To find the long-run equilibrium, then determine if output is above or below potential; for example, if output lies below potential, prices will eventually fall, causing the SRAS curve to shift down, until the economy is at potential again. At long-run equilibrium, the AD, SRAS, and LRAS curves all intersect at the same point.

3. Suppose there is an increase in the money supply. Using the AS-AD analysis, indicate what happens in the short run to i) output ii) the price level P. What happens in the long run to i) output and ii) the price level P? When is money neutral?

4. Suppose the economy is in recession, with output below potential. Illustrate this situation graphically and show what the government (or central bank) must do to stabilize the economy (i.e., to bring output to potential.)

5. Figure 1 shows a graph of oil prices in the U.S. Because it raises the price of firms' inputs, an oil price increase could be represented as a sudden once-off increase in prices charged by all firms.

   a. Illustrate graphically an oil price increase in an AS-AD diagram, and indicate the short-run equilibrium.

   b. Indicate whether the model's prediction is consistent with Figure 1 (i.e., oil price increases coinciding with recessions.)

   c. According to Okun's law, what happens to unemployment after an oil price increase?

   d. What happens in the long run?

6. In a recession, supply-side economists would recommend a policy such as the reduction of marginal tax rates on labour income *and* a reduction on VAT (i.e., a tax on goods purchases) for one year.

   a. What are the implications of this change for the level of aggregate demand?

   b. What are the implications for the level of potential output?

   c. Illustrate these changes graphically, and show the short-run equilibrium.

   d. *Assuming* the LRAS and AD curves remained where they were, what would happen in the long run?

   d. How does this policy differ in spirit from a standard Keynesian one?

7. Suppose that the level of *total factor productivity* in an economy rises.

   a. What happens to the level of potential output?

   b. Illustrate this development using the AS-AD analysis.

   c. What happens eventually to the price level?

   d. If the central bank wished to prevent deflation, what would it have to do?

Figure 1: Oil Price Shocks and U.S. Recessions.