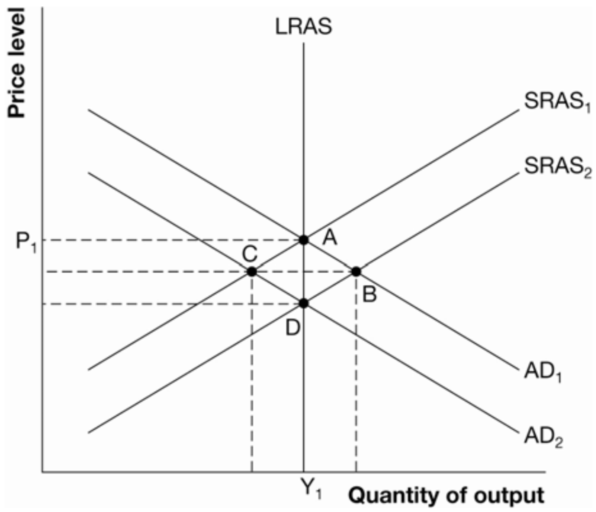
Chapter 36

1. Use the aggregate supply and aggregate demand diagram in Exhibit 1 to answer the following questions.

Exhibit 1



a. Suppose the economy is at long-run equilibrium at point A. Suppose that the economy suffers a macroeconomic shock in the form of a reduction in demand for its exports, but the shock is asymmetric – other economies are not affected similarly. If the exchange rate can adjust, what is the path followed by the economy as a result of this shock?

Answer:
The aggregate demand curve shifts to the left, from AD_1 to AD_2, moving the economy initially to point C. Output falls and unemployment rises. Since demand for the country's exports has fallen, the foreign exchange value of the country's currency falls, making the country's exports cheaper to overseas buyers. This raises aggregate demand, so shifting the aggregate demand curve back from AD_2 to AD_1. Thus long-run equilibrium is restored at point A, with output and the price level unchanged from their original levels.

b. Suppose the same macroeconomic shock occurs but this time the economy concerned has joined a currency union that includes all its main trading partners. What is the path followed by the economy as a result of the macroeconomic shock now?

Answer:
The aggregate demand curve shifts to the left, from AD_1 to AD_2, moving the economy initially to point C. Output falls and unemployment rises. Over time, as wages and prices adjust downwards, the short-run aggregate supply curve shifts to the left, from AS_1 to AS_2, moving the economy to point D. Thus long-run equilibrium is restored and output is unchanged from its original level but the price level is lower.

c. Referring to part (b) above, why might the government of the country illustrated in Exhibit 1 find itself in disagreement with the other countries in the currency union over monetary policy?

Answer:
The country illustrated in Exhibit 1 will suffer a period of falling output and rising unemployment as a result of the asymmetric demand shock, and will wish to see interest rates reduced to stimulate aggregate demand. However, the other countries in the currency union are unaffected and do not experience any reduction in output or rise in unemployment. They are likely to oppose any suggestion that interest rates should be reduced. Since there is one monetary policy across the currency union, this will lead to disagreement.

2. Suppose that the German economy is experiencing a recession while other countries in the Eurozone are in long-run macroeconomic equilibrium.

a. What would happen to interest rates on long-term government bonds issued by Eurozone governments if the German government were to increase its budget deficit dramatically to finance additional government spending? Explain your answer.

Answer:
Interest rates on Eurozone government bonds would rise. A dramatic increase in the German government's budget deficit would increase the risk of holding German government debt and so the financial markets would demand a higher rate of return for holding this debt. Because the other Eurozone governments would be expected to assist the German government in the event that it ran into difficulty in meeting its obligations to its creditors, so transmitting some of the increased risk to them, the financial markets would not demand as a high a return on German government bonds as would otherwise be the case. (There would be a free rider problem.) The markets would also demand a higher rate of return for holding the bonds of other Eurozone governments too.

b. What might the members of a currency union do to counter this problem?

Answer:
They might agree limits on the size of the budget deficits that member governments would be permitted to run.

c. What might reduce the need for the German government to increase its budget deficit in these circumstances?

Answer:
Increased labour mobility and increased real wage flexibility, which would act to prevent unemployment rising so high in Germany when aggregate demand was depressed. The Eurozone countries could also agree to operate a Eurozone-wide fiscal policy so that additional government spending in recession-hit Germany could be financed by tax revenues raised from across the Eurozone.