

14.02: MIDTERM EXAM #2

Part A. True, false, uncertain (explain)

1. The interest rate in Hong Kong is about 40 percent, versus 6 percent in the United States - and Hong Kong's dollar is on a fixed exchange rate. So buying Hong Kong bonds is a great investment.
2. Markets probably expect Brazil's currency to strengthen as a result of its high interest rates.
3. The U.S. dollar weakened in 1985, yet the trade balance continued to get worse until 1987. This shows that claims that a weaker dollar helps the trade balance are silly.
4. In the long run the quantity of money in circulation makes no difference to the real economy.
5. As long as there are people willing to work who cannot find jobs, monetary policy should be more expansionary.
6. European countries like France have discovered that they no longer have the ability to set an independent monetary policy; as the US economy becomes more dependent on foreign trade, we will discover the same thing.
7. It is silly to say that an increase in the minimum wage will raise unemployment. All we need is to provide enough demand, and there will be enough jobs.
8. Since monetary policy is ineffective in the long run, we must rely on fiscal policy to achieve full employment.

Part B: Long questions

1. Imagine a world consisting of two countries, Germany and France. In each country the basic open-economy IS-LM model applies:

$$Y = C(Y-T) + I(i) + G + X - Q$$

where imports depend on output and the exchange rate, and money demand is as usual:

$$Q = Q(Y,E)$$

$$M/P = YL(i)$$

and

$$i = i^* + \frac{E^e - E}{E}$$

However, we now assume a one-way real linkage between the economies: For both countries exports depend on the exchange rate, but France's exports also depend partly on Germany's output (we don't allow French output to affect German exports, in order to make life simple):

$$X = X(Y^*, E)$$

(for France only).

(a) Suppose the exchange rate between the two countries is flexible. Describe the impact of an increase in German government spending on the German economy, the exchange rate, and the French economy.

(b) Suppose now that the exchange rate is fixed, with France adjusting its money supply to keep it fixed. Now analyze the impacts of an increase in German government spending.

(c) Finally, suppose that with a fixed exchange rate Germany adjusts its own money supply to keep output from changing. Describe this policy, its effects in Germany, and the effect on France.

2. The wage equation for an economy is

$$W = P^e(A - B \times u)$$

where u is the unemployment rate,

and the price equation is

$$P = W(1 + \mu)$$

- (a) Calculate the natural rate of unemployment for this economy.
- (b) How would this natural rate change if there was an increase in the bargaining power of workers; an increase in the markup of prices over wage costs?
- (c) Suppose that there were an increase in the natural rate of unemployment, for whatever reason. Using the AS-AD model, describe the impact in the short run and the long run.
- (d) Suppose that for some reason peoples' expectation about the current price level were to increase - say because of a past history of inflationary policies. Again using the AS-AD framework, describe the impact of a rise in the expected price level on the economy.