

International Macroeconomics Review Questions IV

John E. Floyd
University of Toronto
May 7, 2013

A Basic Two-Country Model

1. Write down the three equations determining asset (i.e. stock) equilibrium. Since an equilibrium level of money holdings implies an equilibrium level of non-monetary assets, why is the third equation necessary?
2. Using the definition of the real exchange rate, show that if there is less-than-full-employment and a fixed exchange rate real exchange rate will be constant.
3. Now write down the conditions of short-term real goods market (i.e flow) equilibrium) for the two countries, together with the equation determining world output. What determines the full-employment levels of the variables? Why is the deviation of output from its full-employment level negatively related to the deviation of the real interest rate from its full-employment level? Why is no Keynesian multiplier effect present? How do these equations change when the domestic output is a tiny fraction of world output?
4. Write down the equation of the world GG curve. How is this curve related to the GG curves of the individual countries? How does the GG curve differ from the traditional IS curve?
5. Construct the domestic, rest-of-world and world AA curves? How does the AA curve differ from the traditional LM curve?
6. Write down three equations determining the equilibrium price levels of the two countries and the nominal exchange rate under full-employment conditions.
7. Write down four equations determining the domestic and foreign outputs and real interest rates under conditions where price levels cannot change and the outputs can deviate from their full-employment levels. Then show that
 - a) When the countries are roughly of equal size, monetary expansion in one country will increase its output and lower the output of the other country when the exchange rate is flexible, with the negative effect on the other country becoming infinitesimal as the expanding country becomes infinitesimal in size.
 - b) Monetary expansion in one of the two big countries will increase both countries' outputs when the other country fixes the exchange rate.
 - c) A positive real shock in one of the two big countries will raise the world interest rate and expand domestic output under a flexible exchange rate, also raising real output in the other country.
 - d) A positive real shock in one of the big countries will raise the world interest rate and expand domestic output while lowering output abroad when the other country fixes the exchange rate.

- e) When the country conducting monetary and fiscal policy is tiny in size relative to the rest-of-the-world, monetary policy will not work under a fixed exchange rate and fiscal policy will not work under a flexible exchange rate.
- f) When a country is tiny in relation to the rest of the world, output and the price level are determined by stock equilibrium when it lets the exchange rate float, and by flow equilibrium when it fixes the exchange rate.
9. Work through all the analysis in question 8 above using appropriate AA and GG curve graphs. What is the basis for the rZ line?

Conducting Monetary Policy

1. What are the basic objectives of monetary policy?
2. Does it make sense to try to use monetary policy to offset business-cycle fluctuations of output and employment? Does it matter whether the authorities have more information about the state of the economy than does the private sector?
3. Does and should monetary policy operate by manipulating the underlying real interest rate on domestic investment?
4. Could exchange-rate-overshooting occur? Does it occur? Why or why not?
5. Should Canada maintain a fixed exchange rate with respect to the United States? Why or why not?
6. Explain the pooling advantages of fixed exchange rates and the insulation properties of flexible exchange rates.
7. Does it make any sense for a small open economy like Canada to control an interest rate as an objective of monetary policy? What interest rate does the Bank of Canada control, and what are the effects of that control?
8. Should Canada try to maintain domestically the same monetary conditions that exist in the United States? How can it do so? In this case, what should the Bank of Canada do if the U.S. screws up and, as in the 1970s, produces too high a rate of inflation over a period? What should it do if there is a world financial crisis and recession?
9. In what way did the U.S. Federal Reserve Bank screw up monetary policy in the Great Depression? Did other countries react correctly?
10. Explain why the post-war Bretton-Woods system was a key-currency system rather than a traditional gold standard of the sort that existed in the 19th Century and earlier. Explain why the Bretton-Woods system broke down by 1973?
11. What is the basis for the current European Union financial crisis? Are real exchange rate movements within the Union a problem? How could the current problems be avoided in a subsequent currency union? How are these problems avoided or dealt with in a currency union like Canada?