

Universitat de Barcelona
Academic year 2011-2012, Fall Semester
Macroeconomics - Group A8
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Open economy.

List 9 - The Mundell-Fleming model.

Review of the theory.

1. In the Mundell-Fleming model, explain both in the case of floating exchange rate and in the case of fixed exchange rate what happens to income, exchange rate, and net exports when each of the following happens:
 - (a) there is an increase in taxes;
 - (b) there is a reduction in the money supply;
 - (c) the system of quotas on imported cars is suppressed.
2. What are the advantages of a fixed versus a floating exchange rate regime?

Applications.

1. Use the Mundell-Fleming model to predict both in the case of floating exchange rate and in the case of fixed exchange rate what would happen to the income, the exchange rate, and the net exports when each of the following happens.
 - (a) A drop in consumer confidence about the future lower the propensity to consume and increases the propensity to save.
 - (b) The introduction of the Tata Nano into Europe makes consumers switch from domestic cars to foreign cars.
 - (c) The introduction of ATM's reduces the money demand.
2. A small open economy with a floating exchange rate is in a recession with an equilibrated trade balance. If the policy makers wanted to reach full employment while at the same time keep the net exports balanced, which combination of monetary and fiscal policy would they adopt?

3. The Mundell-Fleming model considers the world's interest rate, r^* , as an exogenous variable. Explain what happens when this variable changes.
 - (a) What can have an impact on the world's interest rate?
 - (b) If there is a floating exchange rate, what happens to income, exchange rate, and net exports when the world's interest rate increases?
 - (c) What if the exchange rate is fixed?
4. The entrepreneurs and the policy makers sometimes seem to worry about the competitiveness of the domestic industries, that is, about their ability to sell profitably their products in the global markets.
 - (a) How would the competitiveness be affected by a variation in the exchange rate?
 - (b) Suppose we want to help the domestic companies to become more competitive without altering the income. What would be the mix of monetary and fiscal policy that we should adopt?

5. Suppose that an increase in income implies an increase in imports and, as a consequence, a reduction in net exports. In other words, the general functional form for net exports is

$$XN = XN(e, Y).$$

Analyze the effects of a fiscal expansion on both the income and the trade balance in a small open economy. Distinguish the effects under a floating versus a fixed exchange rate regime. Give a taxonomy for fiscal and monetary policy under both regimes similar to the one shown in class.

6. Suppose that the demand for real money balances depends on the disposable income. In other words, the general functional form for the demand for real money balances is

$$M/P = L(r, Y - T + TR).$$

Analyze the effects of a reduction in taxes on both the income and the trade balance in a small open economy. Distinguish the effects under a floating versus a fixed exchange rate regime.

7. Use the Mundell-Fleming model to answer the following question about Belgium, that is, a small open economy.

- (a) If Belgium falls into a recession, should the Belgian government prefer the use of the monetary policy over the fiscal policy in order to restore full employment? Justify your answer.
- (b) If Belgium prohibits the import of cars from France, what would happen to the income, the exchange rate, and the trade balance? Examine both the short run and the long run effects. [This is an anticipation of the next list.]