

Chapter 25 Short-Run Economic Policy

Question 25.4

- 25.4A In the case of a small country with a fixed exchange rate, is monetary or fiscal policy more effective to stimulate the economy? Explain in words why this is the case.
- 25.4B Explain how and why these conclusions are mitigated in the case of a large country with a fixed exchange rate.
- 25.4C What is most effective way to stimulate the economy in the case of a small country with a flexible exchange rate, monetary or fiscal policy? Explain in words.
- 25.4D Again explain how and why these conclusions are mitigated in the case of a large country with a flexible exchange rate.

Question 25.5

Below we have listed a number of economic events. Analyze both for a small economy with a flexible exchange rate and for a small economy with a fixed exchange rate what effect these events have on real income (Y) and the exchange rate (S).

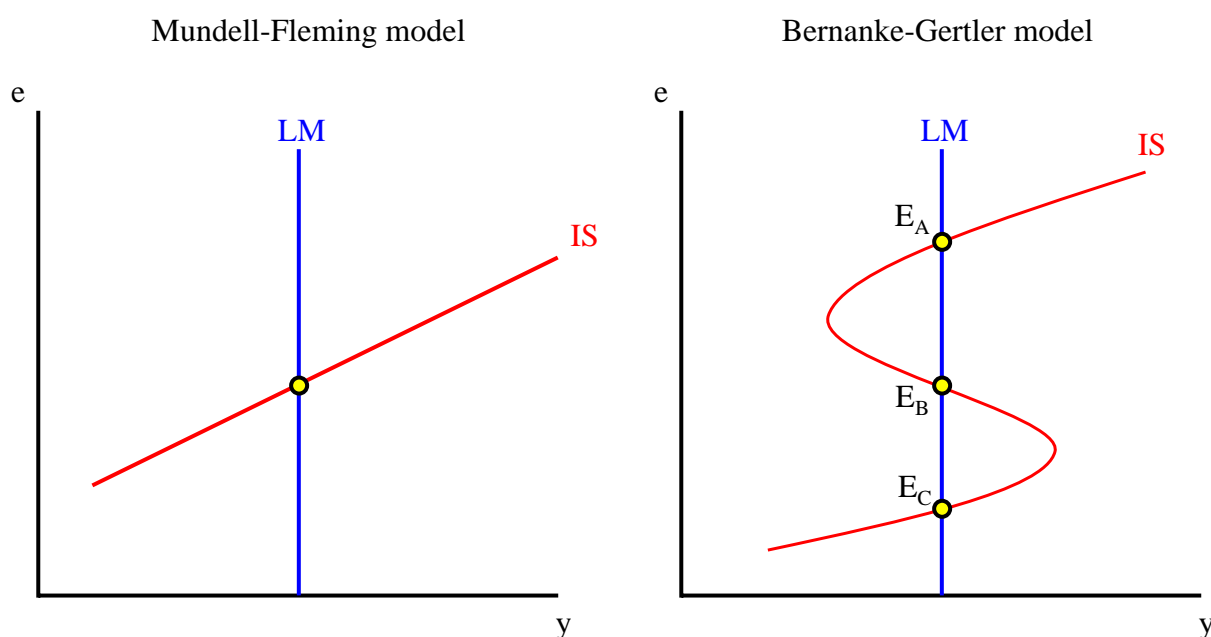
- 25.5A A “buy domestic” campaign is successful and foreign firms do not retaliate
- 25.5B A breakthrough invention in biotechnology makes biotechnology investments more profitable
- 25.5C Government spending increases because of extra infrastructure constructions
- 25.5D The central bank raises the discount rate
- 25.5E A new law is passed to make credit cards illegal

Question 25.6¹

One of the explanations for currency crises, particularly the Asian crisis, is given by the so called Bernanke-Gertler model. In their 1989 paper Bernanke and Gertler describe a slightly adapted Mundell-Fleming model by assuming that:

1. Investment is often wealth constrained. This means that a firm can only obtain credit when its wealth is large enough. If for one reason or another the wealth of a firm decreases sharply, it is no longer able to invest.
2. A substantial share of the firms' debt is held in foreign currency.

The left figure below shows the familiar Mundell-Fleming model. It pictures a small country with a flexible exchange rate. It differs from the representation in figure 25.8 in the main text because the exchange rate is indicated on the vertical axis instead of the interest rate. The right figure shows the Mundell-Fleming model when the assumptions of Bernanke and Gertler are introduced.



¹ Based on Paul Krugman, "Analytical afterthoughts on the Asian crisis".

- 25.6A The IS- en LM-curve in the left figure looks different compared to the curves in the main text of the chapter. Explain the shape of the new IS- en LM-curve.
- 25.6B In the Bernanke-Gertler model the IS-curve obtains a backward bending section (the sections around E_A and E_C remain the same). Explain this property of the IS-curve in the Bernanke-Gertler model.

The figure of the Bernanke-Gertler model shows three equilibriums. In which equilibrium the economy will be depends on the expectations of foreign investors. If we assume that the economy is initially at E_B and foreign investors believe that the currency of an economy will depreciate, the economy moves from E_B to E_A . If foreign investors are convinced that the currency will appreciate, the economy moves from E_A to E_C . So the Bernanke-Gertler model contains a self-fulfilling prophecy.

- 25.6C Why is E_A a bad equilibrium and E_C a good equilibrium?

Assume that for one reason or another foreign investors believe that the currency of the economy will depreciate and the economy will consequently move from E_B to E_A . What can the government do to prevent the economy from reaching a bad equilibrium?

- 25.6D In the wake of a currency crisis the IMF mostly advises to impose fiscal austerity. Explain whether this is a good idea in the Bernanke-Gertler model.
- 25.6E The IMF also often recommends a temporary sharp tightening of monetary policy to support the exchange rate, followed by a gradual loosening once confidence has been restored. Explain whether this policy recommendation will help to prevent a currency crisis.

Question 25.7

The [simulation file of question 25.7](#) presents a Mundell-Fleming model of a small economy with a flexible exchange rate. The model is slightly more elaborate compared to the one presented in the book. Fiscal policy can be exercised by changing either the tax rate (which affects the economy via private consumption) or government expenditures (which affect the economy directly). Money supply remains the only monetary policy variable.

To get some feel of the model we will first analyze the effects of changes in exogenous variables that can not be influenced by the authorities.

- 25.7A How do domestic output, the domestic interest rate and the exchange rate change when the foreign interest rate increases? Explain the sign of the changes.
- 25.7B How do these three endogenous variables change when foreign output increases? Again explain the sign of the changes.

Suppose that the authorities of the small economy want to increase national production in order to reduce unemployment.

- 25.7C Explain whether and why fiscal policy is effective in this case. Does it matter whether the government changes the tax rate or the government expenditures?
- 25.7D Explain whether and why monetary policy is effective in this case.

Now suppose that the authorities still want to increase output but at the same time want to keep the exchange rate fixed.

- 25.7E When the government decides to increase government expenditures, what does the central bank of the small country have to do in order to keep the exchange rate fixed? Is the increase in government expenditure now successful to increase output?

Question 25.8

Suppose the world consists of only two countries. One of these countries suffers from a so-called twin deficit. It has both a government deficit and a deficit on the current account. After the issue of the twin deficit has been discussed extensively in the academic world and by policy advisors, the authorities of the country concerned decide to solve at least the government deficit. The Mundell-Fleming model with two large countries and a flexible exchange rate is used to formulate policy actions. The [simulation file of question 25.8](#) offers you this Mundell-Fleming model of two countries.

- 25.8A Which of the two countries has a twin deficit (country 1 or 2)?
- 25.8B How can fiscal policy be used to solve the government deficit? Discuss what effect this has on the interest rate, exchange rate and the welfare of both countries.
- 25.8C How can monetary policy be used to solve the government deficit? Discuss what effect this has on the interest rate, exchange rate and the welfare of both countries.
- 25.8D Is it more attractive to use fiscal or monetary policy to solve the government deficit? Also pay attention to the long term effects of both policy measures even though the Mundell-Fleming model only takes the short term into account.
- 25.8E What do the authorities have to do when they do not only want to solve the government deficit but also want to keep the exchange rate fixed? Do you think it is realistic to pursue both policy objectives?