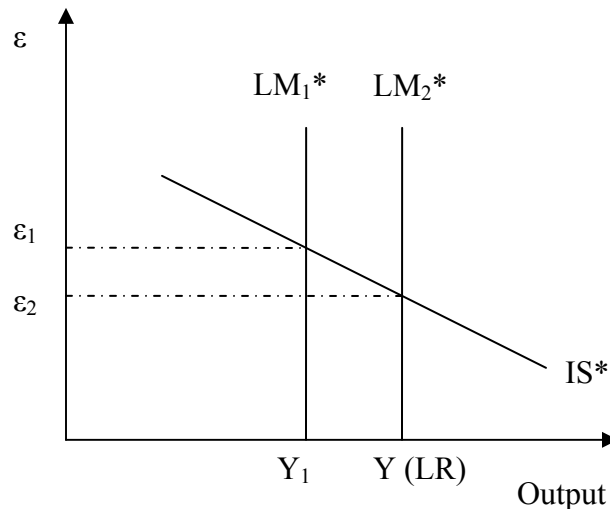


**Some Answers**

- 1) Explain briefly (2 or 3 sentences) why a monetary contraction for a small open economy under *fixed* exchange rates will have no effect on real income.

*A monetary contraction shifts the  $LM^*$  curve to the left, putting downward pressure on the exchange rate. However, the central bank is committed to the original rate – people will then sell the central bank foreign currency and buy domestic currency. This will then INCREASE the money supply – in fact the money supply returns to precisely what it was before, and thus output does not get affected.*

- 2) If a small open economy with a *flexible* exchange rate is experiencing a recession, what will automatically happen over time to its trade balance, foreign exchange rate, and national output? Illustrate graphically.



*Say that  $Y(LR)$  is the long run output for the economy, while  $Y_1$  is where the economy is right now. Then, what must happen is **PRICES WILL FALL** – this of course means that real money balances rise, implying a rightward shift in the  $LM^*$  curve. Note that this also implies a decrease in the real exchange rate.*

3) The Mundell-Fleming model take the world interest rate  $r^*$  as an exogenous variable. Let's consider what happens when this variable changes.

a) What might cause the world interest rate to rise?

*World demand for investment could rise, or world savings could decline..*

b) In the Mundell-Fleming model with a floating exchange rate, what happens to aggregate income, the exchange rate, and the trade balance when the world interest rate rises?

*Increase in the world interest rate should lower investment (I), and so the  $IS^*$  curve should shift to the left. This lowers the nominal exchange and makes net exports rise, but aggregate income remains constant.*

c) In the Mundell-Fleming model with a fixed exchange rate, what happens to aggregate income, the exchange rate, and the trade balance when the world interest rate rises?

*Again, the  $IS^*$  curve shifts left. Now, however, the  $LM^*$  curve shifts left as well to keep the nominal exchange constant. Net exports thus remains unaffected, but now output decreases.*

4) Suppose the government in a small developing economy places restrictions on agricultural *exports* (say in order to increase the domestic food supply and lower food prices). Use the Mundell-Fleming model to analyze the short-run effects of this policy on the exchange rate and real GDP (illustrate using the graphs) if the country has a:

a) flexible exchange rate

*The  $IS^*$  curve shifts to the left. Exchange rate falls, output remains the same.*

b) fixed exchange rate

*Again, the  $IS^*$  curve shifts to the left.  $LM^*$  curve also shifts to the left such that the exchange rate remains unchanged. Output falls.*

- 5) Finally, use the Mundell-Fleming model to illustrate the short-run effects of the Mexican crises (discussed in the text, pgs 300-331) in a small open economy with a fixed exchange rate. What happens to output, and why?

*See the case study in section 12-4 of the text. In a nutshell, both the  $IS^*$  and  $LM^*$  curves shift to the left, and this lowers  $GDP$ .*