

14.02 Principles of Macroeconomics

Problem Set #8, Questions

Posted during Week # 16, due in the middle of Week # 17.
You must staple a copy of this frontpage on your problem set.
Remember to write down your TAs section name and recitation time and your name.

Name: _____

(Table is for corrector use only)

	1	2	3	Total
I				
II				
III				
Total				

PART I. SHORT QUESTIONS (5 points each)

1. T/F/U (justify your answer). The bilateral exchange rate between US and Japan is 124 (1\$ can buy 124 ¥). Therefore, American tourists in Japan find everything very cheap.
2. T/F/U (justify your answer). Devaluation is always associated with gains in competitiveness.
3. Complete the blanks:

<hr/>	
Current Account	
<hr/>	
Export	1000
Imports	
	<hr/>
	-500
Investment income received	300
Investment income paid	
	<hr/>
	-100
Net transfers received	50
Current Account balance	<hr/>
<hr/>	
Capital Account	
<hr/>	
	500
Increase in US holdings of foreign assets	<hr/>
Net Capital Inflows	<hr/>

PART II. OPEN ECONOMY WITHOUT CAPITAL MOBILITY (15 points each)

Imagine a small open economy in a world of no capital mobility. The economy is characterized by the following behavioral equations:

$$C = c_0 + c_1 (Y-T)$$

$$I = b_0 + b_1 Y - b_2 i$$

$$G = G_0$$

$$T = T_0$$

$$X = x_0 + x_1 Y^* + x_2 \varepsilon$$

$$IM = q_0 + q_1 Y - q_2 \varepsilon$$

$$M^d = m_0 + m_1 Y - m_2 i$$

$$M^s = M_0$$

Where Y^* is the level of foreign output and ε is the real exchange rate.

1. What is the total demand for domestic goods? What is the trade balance? Plot the IS and the LM curves in the (Y, i) space and the trade balance in the (XN, Y) space, assuming that at the equilibrium point the trade balance is zero and the output is at its natural level.
2. Now, assume that at the equilibrium point, the output is below its natural level and there is trade deficit. Explain under what conditions a real depreciation can improve the situation. Use a graph and provide intuition.
3. What policies would you recommend if at the natural output level the economy runs trade deficits?

PART III. OPEN ECONOMY WITH PERFECT CAPITAL MOBILITY (10 points each)

True/False/Uncertainty. Justify your answer intuitively and graphically using the IS/LM/BP model.

1. In a small open economy under fixed exchange rate, monetary policy is extremely effective in altering the output level.
2. In a small open economy under flexible exchange rate, monetary policy is extremely effective in altering the output level.
3. Flexible exchange rate is better than fixed exchange rate regimes in stabilizing domestic output against fluctuations in international output level.