

Problem Set 3

Problem A

Consider a small open economy with large off-shore oil reserves. In the past, the world price of oil was too low for the country to earn much income from oil production. Then, unexpectedly, the world price of oil rose dramatically and, with the rise in the price of oil, the country's real income increased.

- A.1 What would you expect to be the effect of the oil price increase on the country's exchange rate (appreciate or depreciate)? Use a macro model studied in class to explain the theory underlying your answer.
- A.2 How would the effect on the exchange rate be different if the oil price rise was expected to be permanent versus the expectation that it was only a temporary increase? Explain the theory behind your answer.
- A.3 Would you expect the oil price increase to lead to rise or fall in the country's current account and financial account balances? Explain the theory behind your answer.

Problem B

- B.1 The central bank announces that it will lower the money supply with the aim of lowering the price level and thereby improving the country's international price competitiveness. Explain the logic of the central bank policy.
- B.2 If the country followed a fixed exchange rate policy, how would the decision to reduce the money supply likely be manifested in the balance of payments? Explain the theory behind your answer.

Problem C

- C.1 Use the AA-DD model to analyze the effects of the imposition of a tariff on imports.
- C.2 How would the effects differ if the tariff is temporary versus permanent?
- C.3 Using the AA-DD model, analyze the output and balance of payment effects of an import tariff under fixed exchange rates.

Problem D

The table below presents the national income accounts and the balance of payments for an anonymous country. Let's call it Country X. Major macroeconomic changes occurred between Year 1 and Year 2.

- D.1 Briefly describe the macroeconomic changes that occurred between Year 1 and Year 2.
- D.2 Would you say the macroeconomic circumstances of Country X improved or deteriorated between Year 1 and Year 2. Explain your answer.
- D.3 What could have happened in the country or in the world economy to have caused the changes observed in the national income accounts and the balances of payments?
- D.4 How would you assess the country's macroeconomic prospects in Year 3? More precisely, do you see anything in the data for Years 1 and 2 that suggest that the country may run into macroeconomic difficulties in the immediate future?
- D.5 If you do anticipate difficulties, what advice would you offer to the country's macroeconomic policymakers, specifically the central bank and those who determine the country's fiscal policy?

All values are expressed as % of GDP

	Year 1	Year 2
National Income Accounts		
Gross National Saving	36.5	33.3
Private	28.1	27.0
Public	8.4	6.3
Gross Investment	36.8	43.1
Private	26.7	32.6
Public	10.1	10.6
Saving-Investment Balance	-0.3	-9.8
Private	1.4	-5.6
Public	-1.7	-4.3
Balance of Payments		
Current Account Balance	-0.3	-9.8
Trade Balance	-4.6	-14.6
Non-factor Services (Net)	0.0	-1.3
Investment Income (Net)	-2.3	-3.0
Transfers (Net)	6.6	9.0
Financial Balance	5.1	24.7
Net FDI	3.8	9.2
Medium/Long-term Loans	1.7	2.9
Portfolio Investment	2.2	8.8
Short-term Capital (Net)	-2.6	3.8
Errors and Omissions	2.3	-0.5
Overall Balance	7.1	14.3