UNIVERSITY OF ESSEX DEPARTMENT OF ECONOMICS

Session 2005-06 Alexander Mihailov

EC933-G-AU: INTERNATIONAL FINANCE

EXAMPLE QUESTIONS 2005-06

Students are invited to submit answers on any of the following questions to the course supervisor no later than the deadline specified below. Your answers will be evaluated and comments will be made for your guidance about how well you understand the course material. They are not part of the formal assessment of the course. It is suggested that the length of each answer should be as much as you could write in about 50 minutes.

Submission deadline: noon on Monday 8th May 2006.

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1. What is the transfer problem? In the context of the transfer problem, explain the implications of the following three models of balance of payments adjustment: (i) the classical theory; (ii) the multiplier theory; and (iii) the Laursen-Metzler (1950) integrated approach.

2. The static Mundell-Fleming model of the early 1960s can be represented by the following system of two equations:

$$dy = \frac{\delta}{1-\gamma} ds - \frac{\sigma}{1-\gamma} d\imath^* + \frac{1}{1-\gamma} dg,$$

$$dm = \frac{\phi\delta}{1-\gamma} ds - \left(\lambda + \frac{\phi\sigma}{1-\gamma}\right) d\imath^* + \frac{\phi}{1-\gamma} dg.$$

All variables except the world interest rate, $\imath^*$, are in logarithms and d denotes a small change. y is output, s is the exchange rate, g is government expenditure and m is the stock of money. All parameters ($\delta, \gamma, \sigma, \lambda, \phi$) are assumed positive, with $0 < \gamma < 1$.

(a) [30 marks] Derive analytically and interpret the effects of a fiscal expansion on output and money under pegged *versus* under floating exchange rates. (You may draw graphs if that helps your interpretation.)

(b) [20 marks] What can you conclude about the effectiveness of fiscal policy as a stabilisation tool under the alternative exchange-rate regimes?

3. The intertemporal approach to the current account, as illustrated in the simple two-period model of a small open economy, involves the following optimisation problem of the representative agent:

$$\max_{c_1,c_2} \quad U_l \equiv \quad \max_{c_1,c_2} \quad u(c_1) + \beta u(c_2)$$

subject to the present-value intertemporal budget constraint:

$$c_1 + \frac{c_2}{1+r} = y_1 + \frac{y_2}{1+r}$$

where c_i is consumption and y_i is the endowment of a perishable good, with the subscript $i = 1, 2$ referring to the time period; U_l denotes lifetime utility, $u(c_1)$ and $u(c_2)$ being the instantaneous utilities in each of the two periods; and the constants $0 < \beta < 1$ and r are, respectively, the subjective discount factor and the real interest rate.

(a) [15 marks] Derive and interpret the first-order conditions for this general optimisation problem.

(b) [35 marks] Analyse the role of international borrowing and lending by focusing on the special case when $\beta = \frac{1}{1+r}$ and $y_1 < y_2$.

4. Briefly outline the Dornbusch (1976) model of exchange rate determination. Analyse the implications of a monetary *contraction* on the economy. Illustrate your analysis with a relevant diagram.

5. Characterise and discuss the strengths and weaknesses of microfounded (optimising) models *versus* aggregative (ad-hoc) models of open economies. Compare and contrast the predictions of such models.
