UNIVERSITY OF ESSEX DEPARTMENT OF ECONOMICS

Session 2005-06 Alexander Mihailov

EC248-2-SP: MONETARY INNOVATIONS AND CENTRAL BANKS

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.

---

1. What are the key strengths and weaknesses of free banking versus a single issuer of currency (central bank)? Illustrate your answer with historical examples.

2. Explain the main features of each of the following spheres of financial intermediation: (i) off-balance sheet activities of banks, (ii) nonbank finance and (iii) electronic banking (including digital money). Provide examples of the most important types of financial innovation within each sphere.

3. Answer both parts (a) and (b).

(a) [25 marks] Explain the effect of an open market purchase on the short-term interest rate (federal funds rate). Demonstrate graphically your key points.

(b) [25 marks] From the perspective of the money channel, discuss how an open market purchase affects the economy.

4. What **two** major financial statements are banks required to publish periodically? Explain the key difference between them and how they are related. In which financial statement are the principal uses and sources of bank funds reflected? Discuss the economic significance of each of these principal uses and sources.

5. You have been given the following data for the country of Monetaria in March 2005. The required reserve ratio, r (bank reserves to checkable deposits), is 10%. Currency in circulation, C, is 400 billion (units of national currency). Checkable deposits, D, are 800 billion, and excess reserves, ER, total 0.8 billion.

(a) [20 marks] Calculate (approximately), and explain the economic meaning of, the money multiplier, given by the formula $m = (1 + c) / (r + e + c)$, with $c = C / D$ and $e = ER / D$.

(b) [15 marks] In April 2005, the currency (to checkable deposits) ratio, c, dramatically increases to 75%. Calculate the money multiplier in Monetaria for April 2005 and comment on the implications of the change in the currency ratio.

[15 marks] Suppose instead that in April 2005 the currency ratio does not change (i.e. it remains as it is in (a)) but the minimum reserve requirement falls from 10 % to 5%. Calculate again the money multiplier in Monetaria for April 2005 and comment on the implications of the change in the required reserve ratio.
