

ECO1102C, University of Ottawa

Midterm: November 14, 2013

Answer Key

[2 points each]

1. B	11. D	21. D	31. D
2. B	12. B	22. D	32. A
3. C	13. D	23. C	33. B
4. A	14. B	24. D	34. D
5. C	15. C	25. D	35. D
6. C	16. B	26. B	36. A
7. D	17. C	27. C	37. A
8. C	18. B	28. B	38. C
9. B	19. B	29. B	39. B
10. D	20. D	30. A	40. B

41. (5 points) Assume that banks do not hold excess reserves. The banking system has \$50 million in deposits and has a reserve requirement of 10 percent. The public holds \$20 million in currency. Then the public decides to withdraw \$5 million in currency from the banking system. If the Bank of Canada wants to keep the money supply stable by changing the reserve requirement, then what will the new reserve requirement be?

Answer

Money Supply = Currency + Deposits \times Money Multiplier = Currency + Deposits $\times \frac{1}{R}$ [1 point]

Initially: Currency = \$20M and Deposits = \$50M. Thus, the

$$\text{Money Supply} = \$20\text{M} + \$50\text{M} \times \frac{1}{0.1} = \$520\text{M}. \quad [2 \text{ points}]$$

Then: Currency = \$25M and Deposits = \$45M. To hold the money supply constant at \$520M,

$$\text{Money Supply} = \$25\text{M} + \$45\text{M} \times \frac{1}{R} = \$520\text{M},$$

the Bank of Canada will therefore need to reduce the reserve requirement to

$$R = \frac{\$45\text{M}}{(\$520\text{M} - \$25\text{M})} = 9.1\%. \quad [2 \text{ points}]$$

42. (5 points) Suppose that Bill, a resident of Canada, buys software from a company in Japan. Explain why and in what directions this changes Canadian net exports and Canadian net capital outflow.

Answer

The purchase of a foreign good by a Canadian resident is a Canadian import. Since net exports = exports – imports, net exports decrease. [2 points]

Bill pays for the software with Canadian dollars so that the Japanese have obtained more Canadian assets. Net capital outflow = the purchase of foreign assets by domestic residents – the purchase of domestic assets by foreign residents. Thus, the increase in foreign holdings of dollars by Japanese residents decreases Canadian net capital outflow. [3 points]

43. (10 points) Suppose the Bank of Canada sells government bonds. Use a graph of the money market to explain what this does to the value of money and to the price level, and why.

Answer

When the Bank of Canada sells government bonds, the money supply decreases. This happens because people would give cash to the Bank of Canada in exchange for purchasing the bonds. The decrease in the money supply shifts the supply curve in the money market to the left in the diagram below from MS_1 to MS_2 . [3 points]

Equilibrium moves from point A to point B – the value of money increases from $1/P_1$ to $1/P_2$ and the equilibrium quantity of money falls. Since each dollar now buys a larger quantity of goods and services, it takes less to buy goods with it, and so the price level falls from P_1 to P_2 . [3 points]

[4 points for the diagram]

