

13

The Money Supply and Interest Rates

Multiple Choice Answers

- | | | | | | |
|---|---|----|---|----|---|
| 1 | C | 6 | C | 11 | A |
| 2 | A | 7 | B | 12 | C |
| 3 | B | 8 | C | 13 | A |
| 4 | B | 9 | B | 14 | B |
| 5 | B | 10 | B | 15 | C |

Short Answer Questions

Question 1

- (a) The M3, which is the money base plus all bank deposits.
- (b) \$35 million
- (c) Broad money is calculated by adding the M3 (currency and bank deposits) and all deposits with Non-Bank Financial Intermediaries (NBFIs), subtracting any NBFI deposits with banks. It is difficult to measure because of the broad range of NBFI institutions, many of which operate on a relatively small scale outside the direct supervision of the RBA.
- (d) While credit, like money, can act as a medium of exchange, it does not serve as a store of value as money does. This means credit cannot be used to measure the value of goods and services over time and is therefore not used as a measure of the money supply. Also, any exchange of credit must be later followed by an exchange of money.
- (e) Money is a medium of exchange for goods, services and resources removing the need for bartering in the economy, as products are exchanged for money. The value of goods services and resources can be measured by money as a store of value. Money can also be used to measure changes in value over time – as a store of value. Finally money acts as a method of deferred payment by allowing for lending and borrowing.

Question 2

- (a) The interest rate represents the cost of borrowing money or the return on savings (the price of money) and is expressed as a percentage of the total amount borrowed.
- (b) Financial institutions charge a higher rate on loans, known as a lending rate, than they offer when they accept savings deposits, known as a borrowing rate, in order to make a profit and provide for the possibility that the borrower may be unable to repay the loan.

- (c) Long-term interest rates are charged on loans with long term maturities such as mortgages and are often higher to compensate for the risk and low liquidity associated with their length. Short-term interest rates are charged on loans of less than a year, and may be lower. Long term interest rates also tend to be more stable than short term interest rates.
- (d) The supply of money is very inelastic to changes in the interest rate because of the three motives for saving. The transaction and precautionary motive for saving are not affected by the interest rate, only the speculative motive is. Also the main factor in influencing the size of savings is income (even a very high interest rate cannot raise savings if the economy has a low national income).
- (e) A correct answer may include any three of the following (with at least one demand and one supply factor):

Demand factors:

- An increase in investment levels will increase demand for money to fund that investment, raising interest rates.
- An increased demand for more liquid funds (usually due to the transactions motive for holding money) will increase demand for money, increasing interest rates.
- Increased international interest rates may encourage more international borrowers to borrow from Australian banks, increasing demand for money, raising interest rates.

Supply factors:

- If the reserve bank were to sell second-hand government securities in the short term money market, this would lower the money supply, raising the cash rate. Banks will pass on this rise in the cash rate as higher interest rates to maintain their profit margins.
- A decrease in the level of savings will decrease the supply of money, increasing interest rates.
- Higher inflationary expectations will cause lenders to charge higher interest rates to compensate for the reduction in the value of money due to higher prices in the economy.

Question 3

- (a) Exchange Settlement Accounts are accounts held by banks at the RBA in order to provide for daily customer withdrawals and to settle payments with other banks and the RBA.
- (b) When a bank accepts an individual's savings, they are generally able to withdraw their savings at any time. However when a bank lends money to a borrower, the length of the loan is usually fixed, and the bank cannot demand back the money to meet withdrawal requirements. Exchange Settlement Accounts are needed to provide a daily source of funds to meet these withdrawals. Also at the end of the day, banks have obligations to each other which must be settled, exchange settlement accounts provide the funds to settle transactions.
- (c) The cash rate
- (d) A rise in interest rates makes it more expensive for firms and individuals to borrow funds for consumption and investment, reducing the overall level of economic activity. Also, individuals with existing loans will have to pay higher interest payments on their loans, further reducing income and spending in the economy, reducing economic activity.
- (e) To reduce interest rates the RBA would loosen monetary policy. The RBA would buy second-hand commonwealth government securities from the short term money market (and pay for these securities with cash), increasing the balance in bank's exchange settlement accounts. This increases the money supply in the short term money market, lowering the cash rate. Competition between banks will force down interest rates in response to this change in the cash rate.