

Answer Key

Testname: FINAL.TST

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

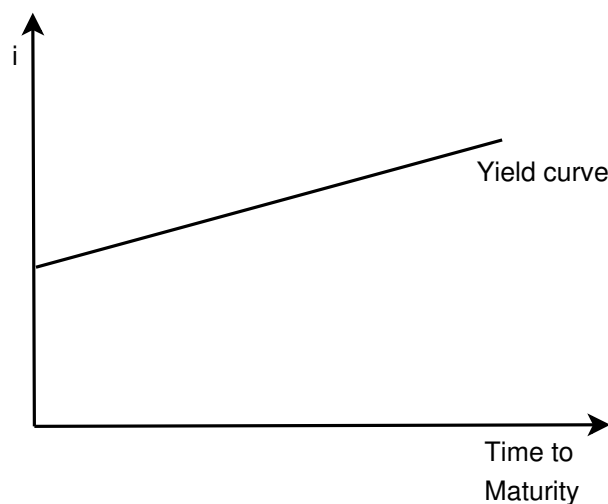
Short Answer Questions

1. Briefly explain why the interest rate on municipal bonds was sometimes higher than the interest rate on Treasury bonds, even though the interest income from munis is exempt from tax.

Answer: Munis are more risky and less liquid than Treasury bonds, so it can happen that the risk (and liquidity) premium raise the interest rate on municipal bonds higher than the interest rate on Treasury bonds.

2. Graph the yield curve implied by the liquidity preference hypothesis when short-term interest rates are expected to stay constant in the future (**important:** do not forget to label the axes).

Answer: The liquidity preference theory implies a mildly upward sloping yield curve, even if short-term interest rates are expected to be the same in the future:



3. Briefly explain why, in general, interest rate rises affect banks negatively.

Answer: Banks usually hold longer-term assets, while offering shorter-term liabilities. Thus, when the interest rate increases, the bank still receives the lower interest rate on its assets, while it has to pay the higher interest rate on its liabilities.

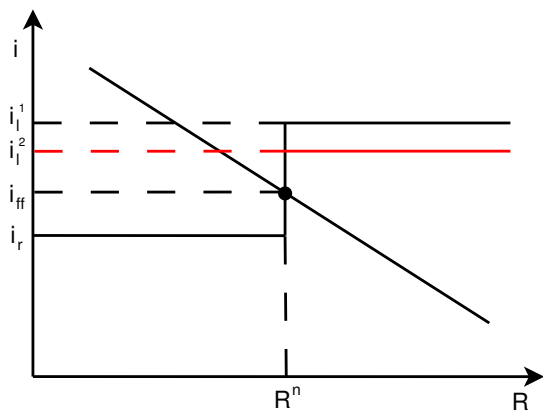
4. Briefly explain why people holding currency or banks holding excess reserves would cause the money supply to react less to changes in the monetary base.

Answer: When people hold more currency, or when banks decide to keep more excess reserves, banks have less money to invest (by giving loans out or by buying securities), thus reducing their ability to create money. This also leads to a fall in the money multiplier, and since $\Delta M = m \times \Delta MB$, the money supply will change by less when the monetary base changes.

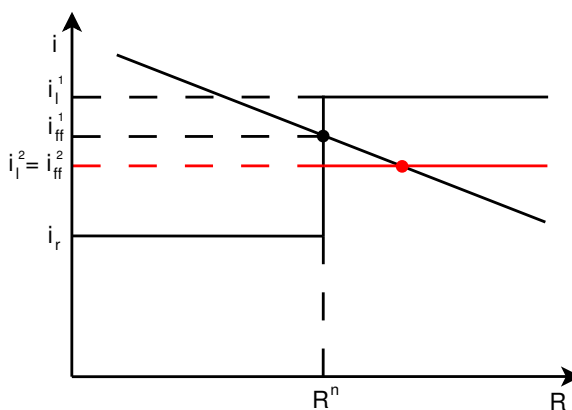
5. When would a rise in money supply lead to an increase in the interest rate in the Keynesian liquidity preference framework?

Answer: An increase in money supply would cause an increase in the interest rate when the liquidity effect is outweighed by the sum of the income, price level, and expected inflation effects.

6. (*extra credit*) Show graphically what would happen in the channel-corridor model if the Central bank would lower the interest rate on loans i_l (**important:** make sure to take all possible scenarios into account).



(a) Case 1 – No effect on i_{ff}



(b) Case 2 – Decrease in i_{ff}

7. (*extra credit and extra difficult*) Suppose that the Fed restricts the total sum of discount loans to 100 billion dollars. Graph the demand and supply of reserves in this case.

Answer: If the Fed restricts the total sum of discount loans, then banks might still be willing to borrow from other banks if the federal funds rate is higher than the discount loan rate ($i_{ff} > i_d$), simply because the Fed would not lend to them any more. In this situation (when $i_{ff} > i_d$), the supply will be fixed at $(R^n + 100)$, meaning that the supply curve will be vertical, as in the graph below.

