Liberty High School

AP Macroeconomics

Mr. Lopez

Chapter 29

The Monetary System

Study Guide

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_

Part 1 – Key terms:

1. Money:
2. Medium of Exchange:
3. Unit of Account:
4. Store of Value:
5. Liquidity:
6. Commodity money:
7. Fiat money:
8. Currency:
9. Demand deposits:
10. Federal reserve (Fed):
11. Central bank:
12. Money supply:
13. Monetary policy:
14. Reserves:
15. Fractional reserve banking:
16. Reserve ratio:
17. Money multiplier:
18. Bank capital:
19. Leverage:
20. Capital requirement:
21. Open market operations:
22. Reserve requirement:
23. Discount rate:
24. Federal funds rate:

Part 2 Problems and short answers:

1. Suppose the Federal Reserve purchases a U.S. government bond from you for $10,000.
   1. What is the name of the Fed’s action?
   2. Suppose you deposit the $10,000 in First student Bank. Show this transaction on First Student’s Bank’s T-account.

First Student Bank

|  |  |
| --- | --- |
| **Assets** | **Liabilities** |
|  |  |

* 1. Suppose the reserve requirement is 20%. Show First student Bank’s T-Account if they loan as much as they can.

First Student Bank

|  |  |
| --- | --- |
| Assets | Liabilities |
|  |  |
|  |  |

* 1. At this point, how much money has been created from the Fed’s policy action?
  2. What is the value of the money multiplier?
  3. After infinite rounds of depositing and lending, how much money could be created from the Fed’s policy action?
  4. If during the rounds of depositing and lending, some people keep extra currency and fail to deposit all of their receipts, will there be more or less money created from the Fed’s policy action than you found in f above? Why?
  5. If during the rounds of depositing and lending, some banks fail to loan the maximum amount of reserves allowed but instead keep excess reserves, will there be more or less money created from the Fed’s policy action. Than you found in part f? Why?

1. Suppose the entire economy contains $1,000 worth of one dollar bills.
   1. If people fail to deposit any of the dollars but instead hold all $1,000 as currency, how large is the money supply? Explain.
   2. If people deposit the entire $1,000 worth of bills in banks that are required to observe a 100% reserve requirement, how large is the money supply? Explain.
   3. If people deposit the entire $1,000 worth of bills in banks that are required to observe a 20% reserve requirement, how large could the money supply become? Explain.
   4. In part c, what portion of the money supply was created due to the banks? (Hint: $1,000 already existed).
   5. If people deposit the entire $1,000 worth of bills in banks that are required to observe a 10% reserve requirement, how large could the money supply become?
   6. Compare and contrast your answer in part e to c. explain why they are different.
   7. If people deposit the entire $1,000 worth of bills in banks that are required to observe a 10% reserve requirement, but they choose to hold another 10% in excess reserves, how large could the money supply become?
   8. Compare your answer in part c to part g. Are the answers the same? Why or why not?
2. What is barter, and why does it limit trade?
3. What are the three functions of money?
4. What are the two basic kinds of money?
5. What two assets are clearly money in the United States, and how do they differ from all other assets? (i.e. define money)
6. What are the two main jobs of the Federal Reserve?
7. What are the monetary policy tools of the Fed?
8. If the Fed wished to expand the money supply, how should they adjust each of their policy instruments that underlie the tools in question 32 above?
9. If the Fed buys $1,000 of government bonds from you and you hold all of the payment as currency at home, by how much does the money supply rise?
10. If the Fed buys $1,000 of government bonds from you, you deposit the entire $1,000 in a demand deposit at your bank, and banks observe a 10% reserve requirement, by how much could the money supply increase?
11. Suppose the reserve ratio is 20%. If you write a check on your account at bank 1 to buy a $1,000 government bond from your roommate, and your roommate deposits the $1,000 in her account at Bank 2, by how much will the money supply change?
12. Suppose there is no deposit insurance. Suppose rumors circulate that Banks have made many bad loans and may be unable to repay their depositors. What would you expect depositors and banks to do, and what would their behavior do to the money supply?
13. What must the Fed do with open market operations and the money supply if it wishes to reduce the federal funds rate?

Part 3 –True or False

1. \_\_\_\_\_\_\_money and wealth are the same thing.
2. \_\_\_\_\_\_\_Fiat money is money that is used in Italy.
3. \_\_\_\_\_\_\_Commodity money has value independent of its use as money.
4. \_\_\_\_\_\_\_the M1 money supply is composed of currency, demand deposits, travelers’ checks, and other checkable deposits.
5. \_\_\_\_\_\_\_When you are willing to go to sleep with $100 in your wallet and you have complete confidence that you can spend it tomorrow and receive the same amount of goods as you would have received had you spent it today, money has demonstrated its value as a medium of exchange.
6. \_\_\_\_\_\_\_Money gas three functions: it acts as a medium of exchange, a unit of account, and a protection against inflation.
7. \_\_\_\_\_\_\_Credit cards are part of the M2 money supply and are valued at the maximum credit limit of the cardholder.
8. \_\_\_\_\_\_\_The Federal Reserve is the central bank of the United States and is run by seven members of the Board of Governors.
9. \_\_\_\_\_\_\_The Federal Open Market Committee (FOMC) meets about every six weeks and discusses the condition of the economy and votes on changes in monetary policy.
10. \_\_\_\_\_\_\_If there is 100 % reserve banking, the money supply is unaffected by the proportion of the dollars that the public chooses to hold as currency versus deposits.
11. \_\_\_\_\_\_\_If the Fed purchases $100,000 of government bonds, and the reserve requirement is 10%, the maximum increase in the money supply is $10,000.
12. \_\_\_\_\_\_\_If the fed desires to contract the money supply, it could do any of the following: sell government bonds, increase the discount rate, increase the reserve requirement, and increase the interest paid on reserve.
13. \_\_\_\_\_\_\_If the fed sells $1,000 of government bonds, and the reserve requirement is 10%, deposits could fall by as much as $10,000.
14. \_\_\_\_\_\_\_\_An increase in the reserve requirement, increases the money multiplier, and increases the money supply.
15. \_\_\_\_\_\_\_If banks choose to hold excess reserves, lending decreases, and the money supply decreases.

Part 4- Additional critical thinking

1. Suppose you a person friend of Ben Bernanke (the chairman of the Board of Governors of the federal Reserve System) He comes over to your house for lunch and notices your couch. Mr. Bernanke is so struck by the beauty of your couch that he simply must have it for his office. Mr. Bernanke buys it from you for $1,000 and, since it is for his office, pays you with a check drawn on the Federal Reserve Bank of New York.
   1. Are there more dollars in the economy than before? Why or why not?
   2. Why do you suppose that the fed doesn’t buy and sell couches, real estate, and so on instead of government bonds when they desire to increase the money supply?
   3. If the fed doesn’t want the money supply to rise when it purchases new furniture what might it do to offset the purchase?