Chapter 17 Money & the Fed Reserve Answers

1. The main disadvantage of fiat money compared to a barter system is that fiat money:

a. **can easily lose value through government action.**
b. is not always accepted as payment.
c. must be the backed by a commodity.
d. is cumbersome to store, transport and exchange.
e. requires a double coincidence of wants.

2. When money is acting as a medium of exchange, the function it performs is to:

a. make purchases easier for the government to track.
b. make budgeting and comparison shopping easier.
c. **allow you to make exchanges more easily.**
d. allow you to measure the value of goods precisely.
e. promote efficiency by discouraging needless exchanges.

3. Money serves as a unit of account when goods:

a. have a value expressed in terms of both a commodity money and a commodity-backed money.
b. **have a value expressed in the same currency, thus allowing comparisons.**
c. are no longer used to back currency.
d. align in a double coincidence of wants.
e. have a value that remains constant over time.

4. When a village records the value of each family's dwelling in terms of an equivalent number of oyster pearls, pearls are serving as:

a. a medium of exchange.
b. **a unit of account.**
c. commodity-backed money.
d. a substitute currency.
e. a bartered good.

5. What function of money is highlighted if someone puts cash under their mattress to have on hand for unexpected emergencies?

a. Fiat money.
b. **Store of value.**
c. Medium of exchange.
d. Unit of account.
e. Commodity money.

6. The value of money ________ when the price level increases.

a. holds steady
b. increases
c. **decreases**
d. becomes harder to measure
e. becomes easier to measure

7. Which of the following does NOT involve gold fulfilling one of the functions of money?

a. A gold miner who needs a new shovel pays for it with gold dust.
b. A coin shop runs an ad describing gold coins as “a great investment”.
c. In a frontier area, a seller of mules lists prices in terms of ounces of gold.
d. A fancy restaurant serves a dessert decorated with edible gold leaf.
e. An individual keeps gold under a mattress, in case one day paper money becomes worthless.

8. As financial intermediaries, commercial banks pay their expenses and earn a profit by:

a. paying depositors a higher interest rate than they charge borrowers.
b. paying depositors a lower interest rate than they charge borrowers.
c. earning interest from their deposits at the Federal Reserve.
d. investing funds from stockholders in the stock and bond markets.
e. investing funds from depositors in the stock and bond markets.

9. Loans and deposits within a bank are:

a. liabilities and assets, respectively, on a bank’s balance sheet.
b. assets and liabilities, respectively, on a bank’s balance sheet.
c. are not found on a bank’s balance sheet.
d. both assets.
e. both liabilities.

10. If a bank increases the amount of cash it has in its vault, its reserves would ________, liabilities would ________, and owner’s equity would ________.

a. increase; stay the same; increase
b. decrease; stay the same; increase
c. increase; decrease; decrease
d. increase; stay the same; decrease
e. decrease; increase; decrease

11. Which of the following is an example of moral hazard?

a. Corey keeps playing football when he would be benched if he told the coach about his concussion.
b. Miles drives too fast, knowing that if he crashes his car, his parents will buy him a new one.
c. Dr. Moreland declines to perform a surgery, out of fear of being sued if things go wrong.
d. Nicole informs police of her friend’s drug-dealing, knowing she is thereby risking her own safety.
e. A soldier who just got a breakup letter from his girlfriend behaves recklessly while out on patrol.

12. If Esperanza decides to deposit $100 in cash into her savings account at the bank, how would this be reflected on the bank's balance sheet?

a. This transaction would not affect the bank's balance sheet.
b. Reserves would increase by $100, and deposits would decrease by a fraction of $100.
c. Reserves would decrease by $100, and deposits would increase by a fraction of $100.
d. Reserves and deposits would increase by $100.
e. Reserves and deposits would decrease by $100.

Use the following example to answer the next five questions.

Imagine that Stella deposits $25,000 in currency (which she had been storing in her closet) into her checking account at the bank. Assume that this institution and others like it have a required reserve ratio of 25%.

13. As a result of this deposit, by how much will the bank's reserves increase?

a. $0
b. $6,250
c. $25,000
d. $31,250
e. $100,000

14. As a result of this deposit, by how much will the bank's required reserves increase?

a. $0
b. $6,250
c. $25,000
d. $31,250
e. $100,000

15. As a result of this deposit, by how much will the bank's excess reserves increase?

a. $0
b. $18,750
c. $25,000
d. $31,250
e. $100,000

16. How much of this deposit can the bank turn around and lend out to borrowers?

a. $0
b. $6,250
c. $12,500
d. $18,750
e. $25,000

17. In the long run, by how much will the total amount of funds available for loans throughout the banking system increase as a result of this deposit?

a. $12,500
b. $18,750
c. $25,000
d. <u>$75,000</u>
e. $100,000

18. The main reason why banks are required to maintain a fraction of their deposits as reserves is to:

a. encourage banks to lend out as much of their deposits as possible.
b. encourage borrowers to borrow from commercial banks instead of the government.
c. ensure that the Federal Reserve Bank (Fed) has the funds it needs for its operations.
d. give the Fed a means of controlling the size of the money supply.
e. <u>prevent withdrawals by depositors from causing bank failures.</u>

19. If a bank has a required reserve ratio of 15% and has required reserves of $255,000, how much does the bank hold in deposits?

a. <u>$1.7 million</u>
b. $270,000
c. $240,000
d. $38,250
e. There is not enough information to solve this problem.

20. The formula for the simple money multiplier, $m^m = 1/rr$, assumes that all currency is deposited into banks. What else does the formula assume?

a. <u>Banks hold no excess reserves.</u>
b. Banks approve all loan applications.
c. Depositors never make withdrawals.
d. All loans are eventually repaid.
e. All bank reserves are deposited at the central bank.

21. If a bank has required reserves of $45 million, excess reserves of $12 million, and deposits of $90 million with a required reserve ratio of 50%, how much can the bank lend out?

a. <u>$12 million</u>
b. $45 million
c. $57 million
d. $102 million
e. $147 million

22. Najeer receives a $500 check from his parents for graduation, and he deposits this in a bank that faces a 15% reserve ratio. What is the consequence if the bank then deposits his check at the Federal Reserve?

a. Excess reserves increase by $500.
b. Required reserves increase by $500.
c. Excess reserves increase by $350 and required reserves increase by $150.
d. <u>Excess reserves increase by $425 and required reserves increase by $75.</u>
e. Excess reserves increase by $500 and required reserves increase by $100.

23. _______ occurs when one party that is protected from risk behaves differently than if it were fully exposed to the risk.

a. Commodity backing.
b. Moral hazard.
c. Owner's equity.
d. Borrowings.
e. Double coincidence of wants.

24. How is it that the banking system is able to lend by a multiple of its excess reserves?

a. Money borrowed from one bank can be deposited at another bank, which in turn can loan part of it out again.
b. The total amount that can be loaned equals total cash in circulation, which is more than the excess reserves.
c. When a borrower wants a bigger loan than a bank can make, the Federal Reserve Bank supplies additional funds.
d. Because the money supply is constantly growing, loanable reserves are always more than actual reserves.
e. Because of bank failures, the total of required reserves is constantly shrinking, making more funds available for loans.

25. If the required reserve ratio is 25%, what is the simple deposit multiplier?

a. 0.25
b. 4
c. 5
d. 25
e. 50

26. If the required reserve ratio is 8%, what is the simple deposit multiplier?

a. 0.08
b. 8
c. 12.5
d. 24
e. 48

27. A bank has excess reserves of $400,000, deposits that the bank plans to loan out. If banks face a 25% required reserve ratio, what would be the maximum impact on the money supply if the bank loans out all of the excess reserves?

a. $0
b. $400,000
c. $800,000
d. $1.2 million
e. $1.6 million

28. Federal funds are:

a. created as banks lend out money.
b. any funds printed by the federal government.
c. private bank deposits at the Federal Reserve (Fed).
d. Fed deposits at private banks.
e. government agency deposits at the Fed.

29. To decrease the money supply, the Federal Reserve could:

a. **increase the discount rate.**
b. decrease the required reserve ratio.
c. forbid the reselling of U.S. Treasury securities.
d. encourage banks to lend money to borrowers.
e. conduct an open market purchase of U.S. Treasury securities.

30. The sale of existing U.S. Treasury securities by the Federal Reserve will:

a. have no effect on the money supply.
b. increase the money supply.
c. increase the reserves at banks.
d. decrease the amount of U.S. Treasury securities held at banks.
e. **decrease the money supply.**

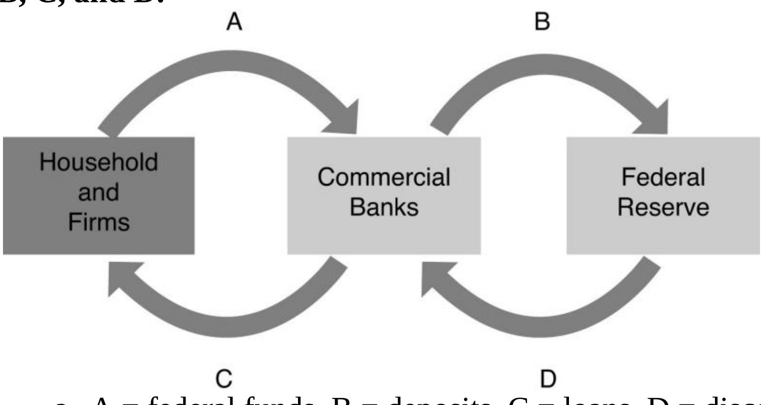
31. The purchase of existing U.S. Treasury securities by the Federal Reserve will:

a. have no effect on the money supply.
b. decrease the money supply.
c. **increase the money supply.**
d. decrease the reserves at banks.
e. increase the amount of U.S. Treasury securities held at banks.

32. Money created by the money multiplier effect can also be destroyed by the same effect. How or when does this happen?

a. When the government stops dropping cash from helicopters.
b. When a bank loan is made.
c. **When funds are withdrawn from the banking system.**
d. When income earners pay taxes to the government.
e. When funds are used to buy physical capital.

In the following figure, the arrows represent flows. Identify each of the flows for points A, B, C, and D.



a. A = federal funds, B = deposits, C = loans, D = discount loans
b. A = federal funds, B = loans, C = federal funds, D = discount loans
c. A = loans, B = federal funds, C = deposits, D = discount loans
d. **A = deposits, B = federal funds, C = loans, D = discount loans**
e. A = discount loans, B = federal funds, C = loans, D = deposits

33. Quantitative easing is the:

a. gradual release of money into the money supply through open market operations.
b. targeted use of open market operations in which a central bank targets certain markets.
c. strategy of increasing the money supply by buying U.S. Treasury securities on the open market.
d. slow injection of money into the economy by the Federal Reserve.
e. gradual decrease in the discount rate used to increase the money supply.

34. What happened in 2008 to reduce the value of the money multiplier used to estimate the size of the money supply?

a. The Federal Reserve (Fed) changed the reserve requirement.
b. The Fed changed the discount rate.
c. The Fed stopped lending to banks.
d. Banks stopped lending to each other.
e. Banks started holding excess reserves.

35. From a macroeconomic perspective, when is the availability to banks of discount-rate loans important?

a. In turbulent times, when many banks could be in danger of failing.
b. In times of strong economic growth, when the money supply is expanding.
c. In economic slowdowns, when the money supply is not growing.
d. During periods when banks are holding excess reserves.
e. At times when the Federal Reserve is making adjustments to banking regulations.

36. What does it mean for the Federal Reserve Bank (Fed) to be the "lender of last resort"?

a. It will make loans to individuals when no bank will do so.
b. It will make loans to a bank when no other bank will do so.
c. It will buy Treasury bonds when no private entity will do so.
d. A loan from the Fed is the least desirable kind of loan.
e. A loan from the Fed is normally the last step on the way to bank failure.

37. How does the Federal Reserve Bank's selling of newly issued Treasury bonds affect the money supply?

a. The funds used to pay for the bonds are put into circulation, increasing the money supply.
b. The funds used to pay for the bonds are taken out of circulation, increasing the money supply.
c. The funds used to pay for the bonds are taken out of circulation, decreasing the money supply.
d. The funds used to pay for the bonds are put into circulation, decreasing the money supply.
e. There will be no effect on the size of the money supply.

38. Why are credit cards excluded from the equation for money supply?

Answer: Credit cards are not part of the money supply because they reflect a loan from a third party to a purchaser. The purchaser eventually repays the loan.

39. What does it mean when we say that commercial banks are financial intermediaries? What is the primary way that commercial banks make a profit when they act as financial intermediaries?

Answer: Commercial banks are "financial intermediaries" because they take in deposits from depositors and then allocate a portion of those deposits to people and businesses that are seeking loans. Acting as a financial intermediary can be profitable for a bank when it pays a lower interest rate to depositors than it charges to those who borrow from the bank.

Answer the next two questions with this information.

Consider a situation where the Federal Reserve purchased $20,000 in Treasury securities from an individual and then that individual deposited the $20,000 he received into his checking account at the bank.

40. If the required reserve ratio is 25%, write out the bank's balance sheet at the initial moment of the deposit and include the entries for required reserves, excess reserves, and deposits.

Answer:

Bank's Balance Sheet	
Assets	**Liabilities**
Required reserves: \$5,000 Excess reserves: \$15,000	Deposits: \$20,000

41. After the initial deposit, the bank decides to lend out the legally maximum amount of funds to borrowers who do business at other banks. If the required reserve ratio is 25%, write out the bank's balance sheet and include the entries for required reserves, excess reserves, loans, and deposits.

Answer:

Bank's Balance Sheet	
Assets	**Liabilities**
Required reserves: \$5,000 Excess reserves: \$0 Loans: \$15,000	Deposits: \$20,000

42. Explain what excess reserves are. Why do banks face a disincentive to hold a significant amount of excess reserves?

Answer: Excess reserves represent customer deposits that are not lent out to others and that the bank is not required by law to keep. Excess reserves are stored either as cash in the vault or as excess deposits at the Federal Reserve (Fed). Banks face a disincentive to hold excess reserves because of the high opportunity cost associated with having cash sitting in the vault rather than being lent out or by having a deposit at the Fed that pays a lower interest rate than would be earned if funds were lent out to borrowers.

43. One of the roles of the Federal Reserve (Fed) is to regulate banks. What specifically does the Fed monitor within individual banks? Provide two reasons why it is important to regulate banks even though they are private businesses.

Answer: As a regulator, the Fed sets and monitors the reserve requirements of banks and examines the riskiness of the assets on a bank's balance sheet. This regulatory role is important because of the strong interconnections that exist within the banking industry. These interconnections mean that banking problems can spread quickly. These regulations set by the Fed are also important because of the strong moral hazard problem in the U.S. banking system, where deposit insurance reduces a bank's monitoring of the riskiness of loans made to others.

44. What is quantitative easing? What are the benefits of this new monetary tool?

Answer: Quantitative easing is the targeted use of open market operations where the Federal Reserve buys securities for a specific market. This tool can be useful to reduce the interest rate for a specific market or for a specific timeframe when traditional open market operations do not return the economy to a stable growth rate.

45. What is the interest on reserve balances (IORB)? When did the Fed Reserve begin paying it?

Answer: The rate of interest paid by the Fed Reserve on bank reserves deposited with the Fed. The Fed began paying this in October 2008 during the Great Recession.

46. Why did banks start holding excess reserves during 2008?

Answer: Part of this was due to the risky nature of loans during the Great Recession, but it is no coincidence that the excess reserves climbed immediately after the Fed began paying interest on reserves.

47. What impact does the IORB have on economic activity?

Answer: The Fed can stimulate the economy by ↓ the IORB to encourage banks to lend more, as it did in the period 2016-19. The Fed can slow the economy by ↑ the IORB to encourage banks to lend less, as it did during the COVID-19 recession.