Chapter 11 End of Chapter Quiz

1. When someone keeps $100 in cash under her pillow and one day takes it out and deposits it in a checking account, this action will:

   A. immediatelyincrease the monetary base and the money supply.

   B. have no impact on the monetary base and immediately increase the money supply.

   C. have no impact on the monetary base and eventually increase the money supply.

   D. eventually decrease the monetary base and leave the money supply unchanged.

Answer: C

2. Suppose that foreigners start holding more U.S. currency. For a given interest rate, Americans don't change their holdings of either currency or checking deposits. Assume the Fed keeps the monetary base constant. Describe what happens to:
   I. the money supply
   II.money demand
   III.the equilibrium interest rate

   A. the money supply is unchanged, money demand increases and the equilibrium interest rate increases.

   B. the money supply increases, money demand increases and the equilibrium interest rate is unchanged.

   C. the money supply decreases, money demand increases and the equilibrium interest rate increases.

   D. the money supply, money demand, and the equilibrium interest rate are all unchanged.

Answer: C

3. Prior to the financial crisis of 2008 the majority of the Fed's asset holdings on its balance sheet were ___. In response to the crisis, the Fed's assets grew to include which of the following?
   i. mortgage backed securities
   ii. foreign currency
   iii. bonds issued by Freddie Mac and Fannie Mae

   A. government bonds, i only

   B. domestic currency, ii only

   C. municipal bondsiii only

   D. reserves,ii and iii only

Answer: A

4. Suppose the discount rate is below the federal funds rate, and banks can borrow as much as they want from the Fed. What would happen to the federal funds rate?

   A. The federal funds rate would fall, but stay above the discount rate.

   B. The federal funds rate would fall to the level of the discount rate.

   C. The federal funds rate would rise.

   D. The question cannot be answered without additional information.

Answer: B

5. Milton Friedman believed the Fed should control the money supply precisely. In the 1960s, he proposed that the required reserve ratio be raised to 100 percent. How would this policy improve control of the money supply? What are the drawbacks to the policy?

   A. This policy would somewhat improve control of the money supply with no other drawbacks.

   B. This policy would somewhat improve control of the money supply with the drawback that

banks would not be able to give loans.

C. This policy would give the Fed perfect control over the money supply with no other drawbacks.

D. This policy would give the Fed perfect control over the money supply with the drawback that banks would not be able to give loans.

Answer: D

6. In the text, we ignored traveler's checks in deriving the money multiplier. Suppose we are more careful and include traveler's checks in the money supply. Let *T* be the level of traveler's checks, so *T/D* is the ratio of traveler's checks to checking deposits. Derive the money multiplier in terms of *C/D*, *R/D*, and *T/D*.

A. $m = (C/D + 1 + T/D)/(C/D + T/D)$

B. $m = (C/D + 1)/(C/D + R/D)$

C. $m = (C/D + 1 + T/D)/(T/D + R/D)$

D. $m = (C/D + 1 + T/D)/(C/D + R/D)$

Answer: D

7. Suppose the Fed wants to reduce the money supply by $100. Should it buy or sell government bonds? How much should it buy or sell?

A. The Fed needs to sell government bonds in the amount of $100/*m* where *m* is the money multiplier.

B. The Fed needs to sell government bonds in the amount of $100.

C. The Fed needs to buy government bonds in the amount of $100.

D. The Fed needs to buy government bonds in the amount of $100/*m* where *m* is the money multiplier.

Answer: A

8. If the monetary base is $100, the currency–deposit ratio is 0.5 and the reserve deposit ratio is 0.1, what is the money multiplier and money supply?

A. multiplier: 2.5; money supply: $250

B. multiplier: 0.4; money supply:$40

C. multiplier: 5; money supply: $50

D. multiplier:2.5; money supply:$40

Answer: A

9. The Fed bought an unusually large quantity of Treasury bonds at the end of December 1999. What explains this behavior? (*Hint: search online for* "Y2K".)

A. In anticipation of Y2K the ratio *R/D* increased and the Fed needed to buy large quantities of Treasury bonds to keep the money supply constant.

B. In anticipation of Y2K the ratio *C/D* increased, and the Fed needed to buy large quantities of Treasury bonds to keep the money supply constant.

C. In anticipation of Y2K the monetary base decreased, and the Fed needed to buy large quantities of Treasury bonds to keep the money supply constant.

D. In anticipation of Y2K the banks increased reserves, and the Fed needed to sell large quantities of Treasury bonds to keep the money supply constant.

Answer: B

10. Which is more stable from day to day, the discount rate or the federal funds rate?

A. Since the federal funds rate is set directly by the Fed, this rate is more stable than the discount rate.

B. Since the federal funds rate is a market interest rate, this rate is more stable than the discount rate.

C. Since the discount rate is a market interest rate, this rate is more stable than the federal funds rate.

D. Since the discount rate is set directly by the Fed, this rate is more stable than the federal funds rate.

Answer: D

11. The Fed creates _____ while _____ is(are) created by banks and their customers.

A. M1; M2

B. the monetary base; checking deposits

C. currency; the monetary base

D. traveler's checks; coins

Answer: B

12. Which of the following is part of the monetary base?

A. time deposits

B. traveler's checks

C. currency in circulation

D. All of the answers are correct.

Answer: C

13. When the Fed conducts a contractionary open-market operation of $100, it:

A. reduces reserves by $100.

B. decreases a bank's cash holdings by $100.

C. reduces the monetary base by $100.

D. All of the answers are correct.

Answer: D

14. If you withdraw $500 from an ATM and put it in your pocket, this _____ currency in circulation and _____ the monetary base.

A. reduces; reduces

B. increases; increases

C. has no effect on; reduces

D. increases; has no effect on

Answer: D

15. When the Fed makes a discount loan to a bank, the monetary base _____, and the bank pays the Fed the _____ rate.

A. rises; federal funds

B. falls; discount

C. rises; discount

D. stays the same; federal funds

Answer: C

16. Currency in circulation and in bank reserves are Federal Reserve:

- **A.** assets.
- **B.** liabilities.
- **C.** net worth.
- **D.** bank capital.

Answer: B

17. Suppose you find $1000 buried in your backyard that was *not* in circulation; if you decide to keep it there,

- **A.** federal funds fall.
- **B.** reserves fall and the monetary base rises.
- **C.** the monetary base and M1 are unchanged.
- **D.** M1 rises and reserves fall.

Answer: C

18. When an individual deposits currency into a bank:

- **A.** bank reserves increase.
- **B.** currency in circulation increases.
- **C.** the monetary base increases.
- **D.** All of the answers are correct.

Answer: A

19. Which of the following unambiguously increases the money supply?

- **A.** a decrease in the monetary base
- **B.** an increase in the currency–deposit ratio
- **C.** an increase in the reserve–deposit ratio
- **D.** None of the answers are correct.

Answer: D

20. According to the Board of Governors in August 2008, reserves equaled $44 billion, currency in circulation equaled $777 billion, and checking deposits were $300 billion. The monetary base was _____ and the M1 money supply was _____.

- **A.** $1,077 billion; $821 billion
- **B.** $1,077 billion; $344 billion
- **C.** $821 billion; $1,077 billion
- **D.** $821 billion; $821 billion

Answer: C

21. The bank panics of the early 1930s caused an increase in both the _____, which pushed the _____ down.

- **A.** currency–deposit and reserve–deposit ratios; money multiplier
- **B.** monetary base and the money supply; interest rate
- **C.** federal funds and discount rate; money market interest rate
- **D.** monetary base and the discount rate; money multiplier

Answer: A

22. During the financial crisis of 2007–2009, the money multiplier was ___ 1.0 because banks _____.

- **A.** above; decreased their lending
- **B.** below; increased their lending
- **C.** above; increased their lending
- **D.** below; decreased their lending

Answer: D

23. If *M* stands for the money supply, *B* stands for the monetary base, *D* for deposits, and *m* for the money multiplier, which of the following expressions is correct?

- **A.** $B = m \times M$
- **B.** $M = m \times (B + D)$
- **C.** $M = m / B$
- **D.** $M = m \times B$

Answer: D

24. To expand the monetary base, the Fed will:

- **A.** conduct open-market sales.
- **B.** conduct open-market purchases.
- **C.** raise the discount rate.
- **D.** lower the required reserve rate.

Answer: B

25. Direct loans made to member banks by the Fed are called:

- **A.** federal fund loans.
- **B.** the Term Auction Facility loans.
- **C.** discount loans.
- **D.** repo loans.

Answer: C

26. If the Fed increases the reserve requirement, the monetary base _____ and the money supply _____.

- **A.** stays the same; falls
- **B.** rises; falls
- **C.** falls; falls
- **D.** falls; stays the same

Answer: A

27. Assuming that no other elements of the money multiplier change, when the Fed increases the interest rate it pays on reserves, the reserve–deposit ratio _____ and the money supply _____.

- **A.** increases; increases
- **B.** increases; decreases
- **C.** decreases; decreases
- **D.** decreases; increases

Answer: B

28. When the Fed increases the required reserves ratio:

A. the reserves–deposit ratio increase.

B. the money multiplier increases.

C. the money supply increases.

D. All the answers are correct.

Answer: A

29. If the Fed targets money supply, an increase in money demand will:

A. increase the interest rate as money supply adjusts.

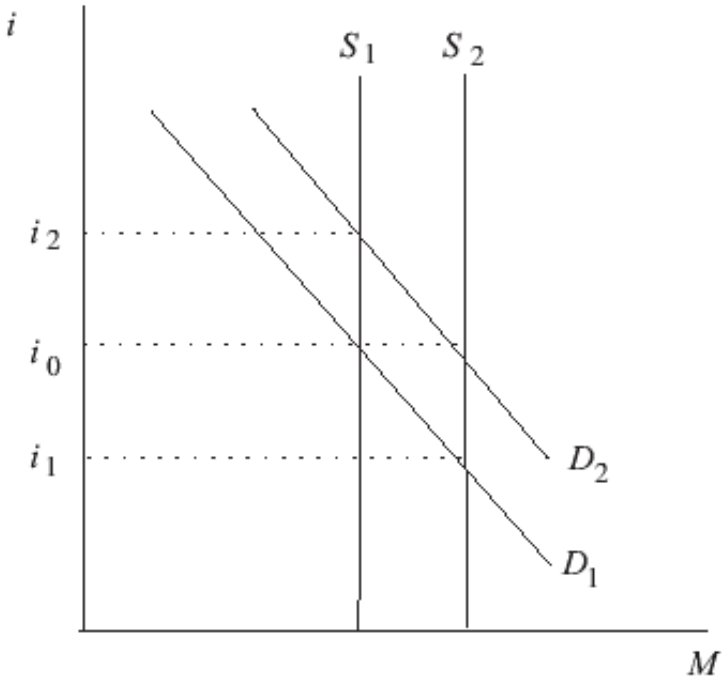
B. reduce the nominal interest rate because money supply will rise more than the change in demand.

C. increase the interest rate because the money supply is fixed.

D. increase the money supply.

Answer: C

30. **Figure 11.1: The Money Market**



Reference: Ref 11-1

(Figure 11.1: The Money Market) Between 1979 and 1982 the Fed targeted money. In 1982, the U.S. economy entered a severe recession. Using the liquidity-preference model in Figure 11.1, what do you anticipate happened to the nominal interest rate, *i*?

A. In a recession, incomes fall; with a fall in income comes a decline in money demand, $D_2 \rightarrow D_1$. If the Fed targeted money, money supply would stay constant at S_2 and the interest rate would fall from i_0 to i_1.

B. In a recession, incomes fall; with a fall in income comes an increase in money supply, $S_1 \rightarrow S_2$. If the Fed targeted money, they would intervene in money markets to reduce the money supply back to S_1 and the interest rate would stay constant.

C. In a recession, incomes fall; with a fall in income comes a decrease in money supply, $S_2 \rightarrow S_1$. If the Fed targeted money, they would intervene in money markets to reduce the money supply back to S_2 and the interest rate would stay constant.

D. In a recession, wealth rises, increasing the demand for money from $D_1 \rightarrow D_2$. If the Fed targeted money, that would reduce money supply back to S_2 and the interest rate would fall.

Answer: A

31. The reason most economists believe the Fed targets _____ is because of constant shifts in _____ caused by changes in transaction technologies.

- **A.** interest rates; the money supply
- **B.** the money supply; money demand
- **C.** interest rates; money demand
- **D.** the money supply; interest rates

Answer: C

32. Suppose the Fed targets the interest rate. If the demand for money curve shifts to the left,

- **A.** the Fed would increase the money supply to keep the interest rate fixed.
- **B.** the Fed would decrease the money supply to keep the interest rate fixed.
- **C.** the interest rate increases.
- **D.** the money supply will remain constant.

Answer: B

33. Open-market operations are conducted _____ at the open-market desk at the _____.

- **A.** monthly; Bank of America
- **B.** weekly; FOMC headquarters in Washington, DC
- **C.** daily; Federal Reserve Bank of New York.
- **D.** daily; Treasury Department

Answer: C

34. The monetary base is currency in circulation plus bank reserves.

Answer: True

35. We can write the money supply as $M = C + D$, where C is currency in circulation and D is checkable deposits.

Answer: True

36. In the Fed's balance sheet, currency in circulation is a liability.

Answer: True

37. To increase the monetary base the Fed should conduct open-market sales.

Answer: False

38. When the Federal Reserve sells U.S. Treasury bonds, it increases the monetary base.

Answer: False

39. Money supply is affected by changes in the reserve–deposit ratio.

Answer: True

40. The Federal Reserve directly affects the monetary base, but other agents' decisions influence the level of the money supply.

Answer: True

41. When commercial banks make loans, money is created and the money supply increases.

Answer: True

42. The money multiplier is given by:

$$m = \frac{\text{currency–deposit ratio} + \text{reserve–deposit ratio}}{1 + \text{currency–deposit ratio}}$$

Answer: False

43. Using the notation in the text, we can derive the money supply by: $M = \left(\frac{C/D + 1}{C/D + R/D}\right) B.$

Answer: True

44. If bank reserves are $44 billion, currency in circulation is $777 billion, and checking deposits are $300 billion, the money multiplier is 1.31.

Answer: True

45. If bank reserves are $44 billion, currency in circulation is $777 billion, and checking deposits are $300 billion, the M1 money supply is $821 billion.

Answer: False

46. The bank panics of the early 1930s caused an increase in the currency–deposit ratios which pushed the money multiplier up.

Answer: False

47. When banks' reserves are less than their deposits, the money multiplier is larger than 1.

Answer: True

48. Everything else being the same, an increase in the reserve–deposit ratio increases the money multiplier.

Answer: False

49. Everything else being the same, an increase in the currency–deposit ratio decreases the money multiplier.

Answer: True

50. During the last financial crisis in the United States (2007–2009) the reserve–deposit ratio increased above 1.

Answer: True

51. To change the monetary base, the preferred tool used by the Fed is the discount rate.

Answer: False

52. The Fed's open-market operations and changes in the discount rate affect the monetary base.

Answer: True

53. Changes in the discount rate are the Fed's preferred method to control the money supply.

Answer: False

54. The Fed sets the discount rate above the federal funds rate target to encourage banks to borrow from one another.

Answer: True

55. If the Fed targets money, changes in money demand have no effect on interest rates.

Answer: False

56. When targeting interest rates, the Fed must conduct open-market operations daily.

Answer: True

57. In practice, the Fed targets interest rates.

Answer: True

58. If the Fed targets the interest rate and the demand for money curve shifts, then the money supply is adjusted to keep the interest rate fixed.

Answer: True

59. The federal funds rate is the interest rate that banks charge each other for overnight loans.

Answer: True

60. The money supply is affected by

I. changes in the monetary base.
II. changes in bank's currency deposit ratio.
III. the speed of money printing presses.

A. I

B. I

C. III

D. I and II

Answer: D

61. Many economists say that while the _____ in the money supply during the Great Depression was not the deliberate policy of the Fed, they do fault it for not recognizing _____.

A. rise; the bank panic

B. rise; the relationship between money and inflation

C. drop; the relationship between money and output

D. drop; the effects of the "dust bowl"

Answer: C

62. To maintain the target federal funds rate, the Fed conducts _____ to ensure that the supply of _____ equals demand.

A. open-market operations; overnight loans

B. discount loans; deposits

C. discount loans; reserves

D. sterilized intervention; dollars

Answer: A

63. If everyone in an economy decides to hold $100 more in currency, what will happen?

A. The monetary base will fall.

B. M1 will fall.

C. Bank reserves fall and Fed liabilities increase.

D. None of the answers is correct.

Answer: C

64. Between 1929 and 1933, the U.S. money supply _____ while the monetary base _____.

A. fell; fell

B. fell; rose

C. rose; fell

D. rose; rose

Answer: B

65. From 2009 through 2010, the Fed's target for the federal funds rate was:

A. close to zero.

B. 0.5%.

C. 2.25%.

D. 4.75%.

Answer: A

66. If people hold $4000 in checking deposits and $1000 in currency, the currency–deposit ratio is

A. 4.

B. 3.

C. 1.

D. 0.25.

Answer: D

67. The reserve–deposit ratio equals

A. required reserves divided by checking deposits.
B. bank reserves divided by checking deposits.
C. excess reserves divided by checking deposits.
D. currency divided by checking deposits.

Answer: B

68. If the currency–deposit ratio is 0.20 and the reserve–deposit ratio is 0.20, the money multiplier is

A. 4.
B. 3.
C. 2.
D. 1.

Answer: B

69. An open–market sale of bonds

A. reduces the monetary base and the money supply.
B. increases the monetary base and the money supply.
C. reduces the money multiplier and the money supply.
D. increases the money multiplier and the money supply.

Answer: A

70. A reduction in the reserve–deposit ratio

A. reduces the monetary base and the money supply.
B. increases the monetary base and the money supply.
C. reduces the money multiplier and the money supply.
D. increases the money multiplier and the money supply.

Answer: D

71. A factor that contributed to the Great Depression was

A. the increase of the monetary base that reduced the money supply.
B. the reduction of the monetary base that reduced the money supply.
C. the reduction of reserve requirements that reduced the money supply.
D. the increase of the currency–deposit ratio that reduced the money supply.

Answer: D