Chapter 11 Money Demand and the Equilibrium Interest Rate

11.1 The Demand for Money

1 Multiple Choice
1) When you deposit $100 in a bank, the bank
   A) pays you an interest rate and the deposit is a liability to you.
   B) charges you an interest rate and the deposit is a liability to you.
   C) pays you an interest rate and the deposit is a liability to the bank.
   D) pays you an interest rate and the deposit is an asset to the bank.
   Answer: C

Topic: The Demand for Money

2) When you borrow $2,000 from a bank, you _______ an interest rate and the loan is ________.
   A) pay; a liability to you
   B) pay; an asset to you
   C) receive; a liability to you
   D) pay; a liability to the bank
   Answer: A

Topic: The Demand for Money

3) Your M1 money demand is the amount of money you wish to
   A) earn.
   B) accumulate before you retire.
   C) earn per hour.
   D) leave outside any interest-bearing account.
   Answer: D

Topic: The Demand for Money

4) Veronica’s income is $4,000 a month. She deposits $800 in a saving account, buys $300 worth of
government securities, and leaves the rest for daily transactions. Veronica’s transaction money demand is
   A) $5,100.
   B) $2,900.
   C) $3,200.
   D) $3,700.
   Answer: B

Topic: The Demand for Money

5) Mary is paid on the 1st of every month and her rent is due on the 15th of every month. This is an
example of the
   A) cash flow problem.
   B) financial float.
   C) money management problem.
   D) nonsynchronization of income and spending.
   Answer: D

Topic: The Demand for Money
6) The average monthly balance in Tony's bank account is $650. Tony spends the same amount of money each day during the month and at the end of the month his account balance is $0. Tony's monthly starting balance is
A) $650.
B) $1,300.
C) $975.
D) $21.67.
Answer: B

**Topic: The Demand for Money**

7) The average monthly balance in Aaron's bank account is $2,000. Aaron spends the same amount of money each day during the month, and at the end of the month his account balance is $0. Aaron's monthly starting balance is
A) $6,000.
B) $2,000.
C) $4,000.
D) $3,500.
Answer: C

**Topic: The Demand for Money**

8) The average monthly balance in Yolanda's bank account is $1,800. Yolanda spends the same amount of money each day during a 30-day month, and at the end of the month her account balance is $0. Yolanda spends her money at a constant rate of ________ per day.
A) $120
B) $60
C) $180
D) $360
Answer: A

**Topic: The Demand for Money**

9) The average monthly balance in Bobby's bank account is $3,000. Bobby spends the same amount of money each day during a 30-day month, and at the end of the month his account balance is $0. Bobby spends his money at a constant rate of ________ per day.
A) $75
B) $100
C) $200
D) $300
Answer: C

**Topic: The Demand for Money**
10) Ed’s monthly starting balance is $3,000. Ed spends $100 per day. Initially, Ed keeps all of his income in a non interest-bearing checking account. Ed decided to change his strategy and at the beginning of each month he deposits one-third of his income into his checking account and buys two bonds with the remainder of his income. After 10 days he cashes in one bond and 10 days after that he cashes in the other bond. Which of the following statements is TRUE?
A) If Ed uses either strategy, his average monthly balance is $1,500.
B) The second strategy involves lower money management costs because Ed now earns interest on the bonds he has purchased.
C) Ed's optimal money balance is $100.
D) If the interest rate paid on bonds decreases, the opportunity cost of Ed's original strategy is reduced.
Answer: D

*Topic: The Demand for Money*

11) An increase in the interest rate will
A) have no impact on the optimal money balance.
B) increase the optimal money balance.
C) lower the optimal money balance.
D) either increase or decrease the optimal money balance depending on the level of current household wealth.
Answer: C

*Topic: The Demand for Money*

12) John’s optimal money balance has increased. This could have been caused by
A) a reduction in the costs paid for switching from bonds to money.
B) a decrease in the price of bonds.
C) a decrease in the amount of transactions spending.
D) a decrease in the interest rate.
Answer: D

*Topic: The Demand for Money*

13) Lisa’s optimal monetary balance has decreased. This could have been caused by
A) an increase in the amount of transactions spending.
B) a decrease in the interest rate.
C) a reduction in the costs paid for switching from bonds to money.
D) an increase in the price of bonds.
Answer: C

*Topic: The Demand for Money*

14) The interest rate paid on bonds increases from 4% to 7%. This will cause
A) no change in the optimal balance of money because checking deposits don't earn interest.
B) the optimal balance of money to increase because it raises the opportunity costs of holding money.
C) the optimal balance of money to decrease because it raises the opportunity cost of holding money.
D) the optimal balance of money to increase because it reduces the opportunity cost of holding money.
Answer: C
15) The price of bonds and the interest rate are
A) positively related.
B) negatively related.
C) sometimes positively related and other times negatively related, depending on the bond payments.
D) not related.
Answer: B

16) Ernesto bought a 10% bond a year ago for $15,000. The market interest rate has increased to 20%. Ernesto wants to sell the bond. To be able to sell the bond Ernesto must charge a price of no more than
A) $13,500.
B) $12,000.
C) $7,500.
D) $3,750.
Answer: C

17) Jay bought a 10% bond a year ago for $20,000. The market interest rate has decreased to 5%. Jay wants to sell the bond. To be able to sell the bond Jay must charge a price of no more than
A) $40,000.
B) $30,000.
C) $20,000.
D) $10,000.
Answer: A

18) Which one or more of the following is a motive for holding money?
A) the transaction motive
B) the asset motive
C) the speculative motive
D) all of the above
Answer: B

19) The speculative demand for money is
A) positively related to income.
B) positively related to interest rate.
C) negatively related to interest rate.
D) negatively related to income.
Answer: C
20) The transactions demand for money is
A) positively related to aggregate income.
B) positively related to the interest rate.
C) negatively related to the price level.
D) negatively related to the interest rate.
Answer: A

Topic: The Demand for Money

21) As the interest rate falls, people hold ________ money instead of bonds because the opportunity cost of holding money has ________.
A) more; fallen
B) less; fallen
C) less; risen
D) more; risen
Answer: A

Topic: The Demand for Money

22) If interest rates are lower than what individuals consider normal, they will
A) increase their transaction money demand.
B) increase their speculative money demand.
C) decrease their speculative money demand.
D) decrease their transaction money demand.
Answer: B

Topic: The Demand for Money

23) If interest rates increase to a very high level, people will most likely hold
A) more bonds and less cash.
B) less bonds and less cash.
C) less bonds and more cash.
D) more bonds and more cash.
Answer: A

Topic: The Demand for Money

24) Which of the following will most likely cause a decrease in the quantity of money demand?
A) an increase in the price level
B) an increase in the interest rate
C) an increase in income
D) a decrease in the interest rate
Answer: B

Topic: The Demand for Money
25) The transaction demand for money depends on all of the following EXCEPT
A) income.
B) the price level.
C) the interest rate.
D) the amount of transactions spending.
Answer: C

Topic: The Demand for Money

26) The transaction demand for money depends on
A) the money supply.
B) the price level.
C) bond prices.
D) the interest rate.
Answer: B

Topic: The Demand for Money

27) The speculative demand for money
A) increases when income increases above normal.
B) decreases when interest rates decrease below normal.
C) increases when interest rates decrease below normal.
D) decreases when the price level decreases below normal.
Answer: C

Topic: The Demand for Money

28) The transaction demand for money
A) decreases when interest rates decrease below normal.
B) increases when interest rates increase above normal.
C) decreases when interest rates increase above normal.
D) increases when the price level rises.
Answer: D

Topic: The Demand for Money

29) When the interest rate rises, bond values
A) rise.
B) fall.
C) are unchanged because the interest rate paid on a bond is fixed.
D) will either increase or decrease depending on the type of bond.
Answer: B

Topic: The Demand for Money

30) If the interest rate is higher than normal, people are more likely to hold
A) bonds instead of money because as the interest rate starts to rise, the value of the bonds will increase.
B) bonds instead of money because the opportunity cost of money is high.
C) money instead of bonds because the brokerage fees and other costs of buying bonds are high when the interest rate is low.
D) money instead of bonds because there is a speculative motive for holding a larger amount of money.
Answer: B
Topic: The Demand for Money

Refer to the information provided in Figure 11.1 below to answer the questions that follow.

Figure 11.1

31) Refer to Figure 11.1. A movement from Point D to Point A can be caused by
   A) a decrease in the interest rate.
   B) an increase in income.
   C) a decrease in the price level.
   D) an increase in the interest rate.
   Answer: C

Topic: The Demand for Money

32) Refer to Figure 11.1. A movement from Point B to Point A can be caused by
   A) a decrease in income.
   B) an increase in the price level.
   C) a decrease in the interest rate.
   D) an increase in the interest rate.
   Answer: D

Topic: The Demand for Money

33) Refer to Figure 11.1. A movement from Point B to Point D can be caused by
   A) a decrease in income.
   B) an increase in the interest rate.
   C) a decrease in the interest rate.
   D) an increase in income.
   Answer: D

Topic: The Demand for Money

34) Refer to Figure 11.1. All of the following events can cause a movement from Point E to Point A
   EXCEPT
   A) an increase in income.
   B) an increase in the price level.
   C) a decrease in the interest rate.
   D) an increase in transactions.
   Answer: C

Topic: The Demand for Money

35) Refer to Figure 11.1. The money demand curve will shift from \( \text{Md2} \) to \( \text{Md1} \)
   if
   A) the price level increases.
   B) income decreases.
   C) interest rates fall.
   D) interest rates rise.
   Answer: B

Topic: The Demand for Money
36) Refer to Figure 11.1. The movement from C to B could be caused by
A) a decrease in the interest rate.
B) an increase in the interest rate.
C) a decrease in income.
D) an increase in the price level.
Answer: A

Topic: The Demand for Money

Refer to the information provided in Figure 11.2 below to answer the questions that follow.

Figure 11.2
37) Refer to Figure 11.2. Suppose money demand is currently at Point A. An increase money demand could be caused by:
A) an increase in the interest rate.
B) an increase in income.
C) a decrease in the interest rate.
D) a decrease in income.
Answer: B

Topic: The Demand for Money

38) Refer to Figure 11.2. Suppose money demand is currently at Point A. A decrease in the interest rate to 5%, ceteris paribus, will likely
A) decrease the quantity of money demanded from $200 million to $100 million.
B) increase the quantity of money demanded from $100 million to $200 million.
C) increase the quantity of money demanded from $100 million to $150 million.
D) increase the quantity of money demanded from $150 million to $300 million.
Answer: C

Topic: The Demand for Money

39) Refer to Figure 11.2. Suppose the money demand is currently at Point D. A movement to point C could be caused by
A) a decrease in the interest rate.
B) a decrease in the price level.
C) an increase in the interest rate.
D) an increase in the price level.
Answer: B

Topic: The Demand for Money

40) Refer to Figure 11.2. Suppose that money demand is currently at Point B. A movement to Point D could be caused by
A) an increase in income, ceteris paribus
B) an increase in the price level, ceteris paribus
C) a decrease in the price level, ceteris paribus
D) a decrease in the interest rate, ceteris paribus
Answer: D

Topic: The Demand for Money
41) Which of the following causes the quantity demanded of money to increase?
A) an increase in income  
B) a decrease in income  
C) a decrease in the price level  
D) a decrease in the interest rate  
Answer: D

**Topic: The Demand for Money**

42) The ________ motive shifts the money demand curve, and the ________ motive causes movements along the same money demand curve.
A) speculative; transaction  
B) transaction; precautionary  
C) transaction; speculative  
D) precautionary; transaction  
Answer: C

**Topic: The Demand for Money**

43) If a bond is to pay off one year from now for $220 and is purchased for $200, what is the interest rate?
A) 5%  
B) 10%  
C) 20%  
D) 40%  
Answer: B

**Topic: The Demand for Money**

44) If a bond is to pay off one year from now for $840 and is purchased for $800, what is the interest rate?
A) 5%  
B) 8%  
C) 10%  
D) 20%  
Answer: A

**Topic: The Demand for Money**

45) If a bond is to pay off one year from now for $600 and the interest rate is 20%, what is the price of the bond?
A) $120  
B) $500  
C) $600  
D) $720  
Answer: B

**Topic: The Demand for Money**
46) Related to the *Economics in Practice* on p. 204 [516]: If the estate in the Chekhov play *Uncle Vanya* is earning 2 percent, yet a potential buyer wants to earn more than 2 percent, the sales price of the estate would have to
A) fall.
B) rise.
C) double.
D) no price will bring a higher return
Answer: A

**Topic: The Stock Market and the Economy**

47) Related to the *Economics in Practice* on p. 204 [516]: If the estate in the Chekhov play *Uncle Vanya* is earning 2 percent, the interest rate on suitable securities is 5 percent, and the securities are a better risk than the estate, a potential buyer should require the price of the estate be

A) raised; 5 percent
B) lowered; 5 percent
C) lowered; greater than 5 percent
D) raised; greater than 5 percent
Answer: C

**Topic: The Stock Market and the Economy**

48) Related to the *Economics in Practice* on p. 209 [521]: The increase in the number of ATMs in Italy has had what impact on the market for cash?
A) demand has increased
B) demand has decreased
C) supply has increased
D) supply had decreased
Answer: B

**Topic: The Demand for Money**

49) Related to the *Economics in Practice* on p. 209 [521]: In Italy, checking accounts pay interest. As these interest rates increase, ceteris paribus,
A) the demand for cash increases.
B) the demand for cash decreases.
C) the demand for cash does not change.
D) the supply of cash decreases.
Answer: B

**Topic: The Demand for Money**

2 True/False

1) A mismatch between the timing of money inflow to the household and the timing of money outflow for household expenses is known as the nonsynchronization of income and spending.
Answer: TRUE

**Topic: The Demand for Money**
2) Less switching from bonds to money means less interest revenue lost, but higher money management costs.
Answer: FALSE

*Topic: The Demand for Money*

3) The optimal money balance will increase as the interest rate rises, ceteris paribus.
Answer: FALSE

*Topic: The Demand for Money*

4) When interest rates fall, bond values rise.
Answer: TRUE

*Topic: The Demand for Money*

5) If people think interest rates are above their normal levels, they will want to hold bonds in anticipation of a capital gain when interest rates fall to their normal level.
Answer: TRUE

*Topic: The Demand for Money*

6) Investors may wish to hold bonds when interest rates are low with the hope of selling them when interest rates increase.
Answer: FALSE

*Topic: The Demand for Money*

7) A decrease in the price level will lead to an increase in the interest rate.
Answer: FALSE

*Topic: The Demand for Money*

8) An excess demand for money drives interest rates down.
Answer: FALSE

*Topic: The Demand for Money*

11.2 The Equilibrium Interest Rate

1 Multiple Choice

*Refer to the information provided in Figure 11.3 below to answer the questions that follow.*

**Figure 11.3**

1) Refer to Figure 11.3. At an interest rate of 6%, there is a
A) shortage of money and the interest rate will decline.
B) shortage of money and the interest rate will rise.
C) surplus of money and the interest rate will decline.
D) surplus of money and the interest rate will rise.
Answer: C

*Topic: The Equilibrium Interest Rate*
2) Refer to Figure 11.3. At an interest rate of 3%, there is a  
A) shortage of money and the interest rate will decline.  
B) shortage of money and the interest rate will rise.  
C) surplus of money and the interest rate will decline.  
D) surplus of money and the interest rate will rise.  
Answer: B

Topic: The Equilibrium Interest Rate

3) Refer to Figure 11.3. A decrease in the GDP, ceteris paribus, will likely  
A) increase the equilibrium interest rate without changing equilibrium money holdings.  
B) decrease both the equilibrium interest rate and equilibrium money holdings.  
C) increase the equilibrium interest rate and decrease equilibrium money holdings.  
D) decrease the equilibrium interest rate without changing equilibrium money holdings.  
Answer: D

Topic: The Equilibrium Interest Rate

4) Refer to Figure 11.3. An increase in the price level, ceteris paribus, will likely  
A) increase both the equilibrium interest rate and equilibrium money holdings.  
B) decrease the equilibrium interest rate without changing equilibrium money holdings.  
C) increase the equilibrium interest rate without changing equilibrium money holdings.  
D) keep the equilibrium interest rate constant and increase equilibrium money holdings.  
Answer: C

Topic: The Equilibrium Interest Rate

5) Refer to Figure 11.3. An increase in the money supply, ceteris paribus, will likely  
A) increase the equilibrium interest rate and decrease equilibrium money holdings.  
B) increase the equilibrium interest rate without changing equilibrium money holdings.  
C) decrease the equilibrium interest rate and increase equilibrium money holdings.  
D) decrease the equilibrium interest rate without changing equilibrium money holdings.  
Answer: C

Topic: The Equilibrium Interest Rate

6) Refer to Figure 11.3. A decrease in the money supply and an increase in the GDP will, for sure,  
A) increase the equilibrium interest rate.  
B) decrease the equilibrium interest rate.  
C) increase equilibrium money holdings.  
D) decrease equilibrium money holdings.  
Answer: A

Topic: The Equilibrium Interest Rate

Refer to the information provided in Figure 11.4 below to answer the questions that follow.

Figure 11.4

7) Refer to Figure 11.4. At an interest rate of 8%, there is  
A) an excess demand for money of $400 billion.  
B) an excess supply of money of $800 billion.  
C) an excess supply of money of $400 billion.  
D) an excess demand for money of $800 billion.  
Answer: C
8) Refer to Figure 11.4. At an interest rate of 3%, there is
A) an excess supply of money of $400 billion.
B) an excess supply of money of $800 billion.
C) an excess demand for money of $800 billion.
D) an excess demand for money of $400 billion.
Answer: D

9) Refer to Figure 11.4. The money market will be in equilibrium at an interest rate of
A) 0%.
B) 8%.
C) 5%.
D) 3%.
Answer: C

10) Refer to Figure 11.4. At an interest rate of 8%, firms and households
A) will attempt to increase their holdings of money by selling bonds.
B) are satisfied with the amount of money they are holding.
C) will attempt to increase both their holdings of money and their holdings of bonds.
D) will attempt to reduce their holdings of money by buying bonds.
Answer: D

11) Refer to Figure 11.4. At an interest rate of 3%, firms and households
A) are satisfied with the amount of money they are holding.
B) will attempt to increase their holdings of money by selling bonds.
C) will attempt to increase both their holdings of money and their holdings of bonds.
D) will attempt to reduce their holdings of money by buying bonds.
Answer: B

12) Refer to Figure 11.4. At an interest rate of 5%, firms and households
A) are satisfied with the amount of money they are holding.
B) will attempt to reduce their holdings of money by buying bonds.
C) will attempt to increase their holdings of money by selling bonds.
D) will attempt to increase both their holdings of money and their holdings of bonds.
Answer: A
13) What will happen to the equilibrium interest rate when both money supply and GDP decrease?
A) The equilibrium interest rate increases.
B) The equilibrium interest rate decreases.
C) The equilibrium interest rate remains constant.
D) The impact on the equilibrium interest rate is ambiguous.
Answer: D

*Topic: The Equilibrium Interest Rate*

14) If the quantity of money demanded is greater than the quantity of money supplied, then the interest rate will
A) change in an uncertain direction.
B) rise.
C) remain constant.
D) fall.
Answer: B

*Topic: The Equilibrium Interest Rate*

15) A shortage in the money market causes
A) a decrease in the equilibrium interest rate.
B) an increase in the quantity demanded of money.
C) an increase in the equilibrium interest rate.
D) a decrease in the money supply.
Answer: C

*Topic: The Equilibrium Interest Rate*

16) A surplus in the money market causes
A) a decrease in the equilibrium interest rate.
B) a decrease in the money supply.
C) an increase in the demand for money.
D) a decrease in the quantity demanded of money.
Answer: A

*Topic: The Equilibrium Interest Rate*

Refer to the information provided in Figure 11.5 below to answer the questions that follow.

*Figure 11.5*

17) Refer to Figure 11.5. Assume the interest rate equals 4% and the money supply decreases from $M_s$ to $M_s$.
   If the interest rate remains at 4%.
A) money demand will increase.
B) money demand will decrease.
C) there will be an excess demand for money of $200 million.
D) there will be an excess supply of money of $200 million.
Answer: C

*Topic: The Equilibrium Interest Rate*
18) Refer to Figure 11.5. If the money supply decreases from \( M_s1 \) to \( M_s0 \),
A) money demand must increase for the money market to return to equilibrium.
B) the interest rate will fall to 4%.
C) the interest rate will increase to 6%.
D) the money market will return to equilibrium only if the money supply is decreased to its original level.
Answer: C

*Topic: The Equilibrium Interest Rate*

19) Refer to Figure 11.5. The money supply curve will shift from \( M_s0 \) to \( M_s1 \) if
A) the Fed increases the reserve requirement.
B) the Fed increases the discount rate.
C) the equilibrium level of output increases.
D) the Fed buys U.S. government securities in the open market.
Answer: D

*Topic: The Equilibrium Interest Rate*

20) Refer to Figure 11.5. The money supply curve will shift from \( M_s1 \) to \( M_s0 \) if
A) the Fed increases the reserve requirement.
B) the Fed decreases the discount rate.
C) the equilibrium level of output increases.
D) the Fed buys U.S. government securities in the open market.
Answer: A

*Topic: The Equilibrium Interest Rate*

21) Refer to Figure 11.5. If the money supply increases from \( M_s0 \) to \( M_s1 \),
A) money demand must decrease for the money market to return to equilibrium.
B) the interest rate will decrease to 4%.
C) the interest rate will increase to 8%.
D) the money market will return to equilibrium only if the money supply is increased to its original level.
Answer: B

*Topic: The Equilibrium Interest Rate*

22) Refer to Figure 11.5. The money supply curve will shift from \( M_s1 \) to \( M_s0 \), if
A) the Fed increases the discount rate.
B) the price level increases.
C) the equilibrium level of output decreases.
D) the Fed buys U.S. government securities in the open market.
Answer: A

*Topic: The Equilibrium Interest Rate*
23) If there is a surplus in the money market, the Fed can eliminate it by
A) increasing money demand.
B) decreasing money demand.
C) increasing money supply.
D) decreasing money supply.
Answer: D

Topic: The Equilibrium Interest Rate

24) A shortage in the money market can be eliminated through
A) an increase in GDP.
B) an increase in the price level.
C) a decrease in interest rates.
D) an increase in money supply.
Answer: D

Topic: The Equilibrium Interest Rate

25) When the Fed sells government securities, ceteris paribus, the money supply shifts to the________
and the equilibrium interest rate ________.
A) left; rises
B) right; rises
C) right; falls
D) left; falls
Answer: A

Topic: The Equilibrium Interest Rate

26) Decreasing the required reserve ratio shifts the money supply curve to the_______ and_______ the
equilibrium interest rate.
A) left; increases
B) right; increases
C) left; decreases
D) right; decreases
Answer: D

Topic: The Equilibrium Interest Rate

27) An increase in the level of aggregate output and the purchase of government securities by the Fed will
have what effect on the equilibrium interest rate?
A) no effect on the interest rate
B) a decrease in the interest rate
C) an increase in the interest rate
D) an indeterminate effect on the interest rate
Answer: D

Topic: The Equilibrium Interest Rate
28) Which of the following pairs of events will definitely lead to an increase in the equilibrium interest rate?
A) the sale of government securities by the Federal Reserve and an increase in the price level
B) a decrease in the discount rate and an increase in the level of aggregate output
C) the purchase of government securities by the Federal Reserve and a decrease in the price level
D) an increase in the required reserve ratio and a decrease in the level of aggregate output
Answer: A

29) Which of the following pairs of events will definitely lead to a decrease in the equilibrium interest rate?
A) the purchase of government securities by the Federal Reserve and an increase in the level of aggregate output
B) an increase in the discount rate and an increase in the price level
C) a decrease in the required reserve ratio and a decrease in the level of aggregate output
D) the sale of government securities by the Federal Reserve and a decrease in the price level
Answer: C

30) An increase in the discount rate and an increase in the level of aggregate output will have what effect on the equilibrium interest rate?
A) an increase in the interest rate
B) a decrease in the interest rate
C) no effect on the interest rate
D) an indeterminate effect on the interest rate
Answer: A

31) Refer to Figure 11.6. The demand for money curve will shift from Md1 to Md0 if
A) the Fed sells government securities on the open market.
B) the price level decreases.
C) the interest rate increases.
D) the aggregate level of output increases.
Answer: D

Refer to the information provided in Figure 11.6 below to answer the questions that follow.

Topic: The Equilibrium Interest Rate
32) Refer to Figure 11.6. If the demand for money curve shifts from \( M_d1 \) to \( M_d0 \), the equilibrium interest rate will
A) increase from 5% to 7%.
B) increase from 5% to 10%.
C) decrease from 7% to 5%.
D) remain at 7%.
Answer: A

*Topic: The Equilibrium Interest Rate*

33) Refer to Figure 11.6. If the demand for money curve shifts from \( M_d1 \) to \( M_d0 \) and the interest rate remains at 5%, there will be
A) an excess demand for money.
B) an excess supply of money.
C) an equilibrium in the money market.
D) an equilibrium in the bond market.
Answer: A

*Topic: The Equilibrium Interest Rate*

34) Which of the following leads to an increase in the interest rate?
A) a decrease in the price level
B) a decrease in aggregate output
C) a sale of government securities by the Fed
D) a decrease in the discount rate
Answer: C

*Topic: The Equilibrium Interest Rate*

35) Which of the following leads to a decrease in the interest rate?
A) an increase in the price level
B) a sale of government securities by the Fed
C) an increase in the GDP
D) a decrease in the required reserve ratio
Answer: D

*Topic: The Equilibrium Interest Rate*

Refer to the information provided in Figure 11.7 below to answer the questions that follow.

**Figure 11.7**

36) Refer to Figure 11.7. The demand for money curve will shift from \( M_d0 \) to \( M_d1 \) if
A) the Fed sells government securities on the open market.
B) the price level decreases.
C) the interest rate increases.
D) the level of aggregate output increases.
Answer: D

*Topic: The Equilibrium Interest Rate*
37) Refer to Figure 11.7. If the demand for money curve shifts from \( M_d_0 \) to \( M_d_1 \), the equilibrium interest rate will
A) decrease from 7% to 5%.
B) increase from 5% to 7%.
C) increase from 5% to 6%.
D) remain at 5%.
Answer: C

*Topic: The Equilibrium Interest Rate*

38) Refer to Figure 11.7. If the demand for money curve shifts from \( M_d_0 \) to \( M_d_1 \) and the interest rate remains at 5%, there will be
A) an excess demand for money.
B) an excess supply of money.
C) an equilibrium in the money market.
D) an equilibrium in the bond market.
Answer: A

*Topic: The Equilibrium Interest Rate*

39) A decrease in aggregate output, ceteris paribus, will cause the demand for money to ________ and the interest rate to ________.
A) increase; increase
B) increase; decrease
C) decrease; decrease
D) decrease; increase
Answer: C

*Topic: The Equilibrium Interest Rate*

40) An increase in the price level, ceteris paribus, will cause the demand for money to ________ and the interest rate to ________.
A) increase; increase
B) increase; decrease
C) decrease; decrease
D) decrease; increase
Answer: A

*Topic: The Equilibrium Interest Rate*

41) As the number of transactions in the economy decreases,
A) the supply of money increases.
B) the supply of money decreases.
C) the demand for money increases.
D) the demand for money decreases.
Answer: D

*Topic: The Equilibrium Interest Rate*
42) Which of the following events will lead to a decrease in the equilibrium interest rate?
A) an increase in the level of aggregate output
B) a decrease in the required reserve ratio
C) an increase in the price level
D) a sale of government securities by the Federal Reserve
Answer: B

Topic: The Equilibrium Interest Rate

43) Which of the following events will lead to an increase in the equilibrium interest rate?
A) a decrease in the level of aggregate output
B) a decrease in the discount rate
C) an increase in the price level
D) a purchase of government securities by the Federal Reserve
Answer: C

Topic: The Equilibrium Interest Rate

2 True/False
1) If the Federal Reserve wants interest rates to increase, it will sell bonds.
Answer: TRUE

Topic: The Equilibrium Interest Rate

2) A sale of government securities by the Federal Reserve will put downward pressure on the equilibrium interest rate.
Answer: FALSE

Topic: The Equilibrium Interest Rate

3) To increase the money supply and decrease interest rates, the Fed could purchase government securities.
Answer: TRUE

Topic: The Equilibrium Interest Rate

4) If money demand falls, then the interest rate will rise.
Answer: FALSE

Topic: The Equilibrium Interest Rate

5) If the Federal Reserve lowers the discount rate, then the money supply will rise.
Answer: TRUE

Topic: The Equilibrium Interest Rate

6) If the Federal Reserve lowers the required reserve ratio, then the money supply will fall.
Answer: FALSE
11.3 Looking Ahead: The Federal Reserve and Monetary Policy

1 Multiple Choice
1) In a period of high inflation, the Fed would most likely
A) decrease the discount rate.
B) tighten monetary policy.
C) decrease the required reserve ratio.
D) ease monetary policy.
Answer: B

2) In a period of high unemployment, the Fed would most likely
A) tighten monetary policy.
B) ease monetary policy.
C) ease fiscal policy.
D) tighten fiscal policy.
Answer: B

3) When economists refer to "easy" monetary policy, they mean that the Federal Reserve is taking actions that will
A) increase the demand for money.
B) decrease the demand for money.
C) expand the money supply.
D) contract the money supply.
Answer: C

4) An example of a tight monetary policy is
A) a decrease in the reserve requirement.
B) the Fed selling government securities in the open market.
C) a decrease in the discount rate.
D) a decrease in the federal funds rate.
Answer: B

5) An example of a tight monetary policy is
A) an increase in the reserve requirement.
B) the Fed buying government securities in the open market.
C) a decrease in the prime lending rate.
D) a decrease in the discount rate.
Answer: A
6) When economists refer to "tight" monetary policy, they mean that the Federal Reserve is taking actions that will
A) increase the demand for money.
B) decrease the demand for money.
C) expand the money supply.
D) contract the money supply.
Answer: D

Topic: Looking Ahead: The Federal Reserve and Monetary Policy

7) Which of the following is an example of an easy monetary policy?
A) an increase in the reserve requirement
B) a decrease in the discount rate
C) an increase in the federal funds rate
D) the Fed selling government securities in the open market
Answer: B

Topic: Looking Ahead: The Federal Reserve and Monetary Policy

2 True/False
1) Tight monetary policy stimulates the economy.
Answer: FALSE

Topic: Looking Ahead: The Federal Reserve and Monetary Policy

2) If the Federal Reserve lowers the discount rate it is tightening monetary policy.
Answer: FALSE

Topic: Looking Ahead: The Federal Reserve and Monetary Policy

3) If the Federal Reserve raises reserve requirements it is easing monetary policy.
Answer: FALSE

Topic: Looking Ahead: The Federal Reserve and Monetary Policy

4) Monetary tightening causes the equilibrium interest rate to fall.
Answer: FALSE

Topic: Looking Ahead: The Federal Reserve and Monetary Policy

5) When the Federal Reserve sells government securities it is tightening monetary policy.
Answer: TRUE

Topic: Looking Ahead: The Federal Reserve and Monetary Policy
11.4 Appendix A: The Various Interest Rates in the U.S. Economy

1 Multiple Choice

1) The treasury bill rate is the interest rate paid
A) on government securities that mature in less than a year.
B) on government securities that mature in 5 years.
C) on government securities that mature in 10 years.
D) on government securities that mature in 30 years.
Answer: A

2) The interest rate that commercial banks charge each other for borrowing and lending reserves is called
A) the commercial rate.
B) the price interest rate.
C) the federal funds rate.
D) the discount rate.
Answer: C

3) Which of the following types of interest rates change daily?
A) the prime rate
B) the federal funds rate
C) the discount rate
D) the corporate rate
Answer: B

4) On an unsecured loan, your bank will highly likely charge an interest rate
A) below the prime rate.
B) above the prime rate.
C) below the discount rate.
D) below the federal funds rate.
Answer: B

5) Assume the one-year interest rate on a bond is 8% and the expected one-year rate a year from now is 12%. According to the expectations theory of the term structure of interest rates, the two-year rate will be
A) 8%.
B) 10%.
C) 12%.
D) 22%.
Answer: B
6) Assume the current one-year interest rate on a bond is 2%, and the one-year expected rate a year from now is 3%. According to the expectations theory of the term structure of interest rates, the two-year interest rate is
A) 2%.
B) 3%.
C) 5%.
D) 2.5%.
Answer: D

Topic: Appendix A: The Various Interest Rates in the U.S. Economy

7) The interest rate on a two-year security will continue to adjust until it is equal to
A) half the interest rate on a one-year security.
B) twice the interest rate on a one-year security.
C) an average of the current one-year rate and the expected one-year rate for next year.
D) the sum of the current one-year rate and the expected one-year rate for next year.
Answer: C

Topic: Appendix A: The Various Interest Rates in the U.S. Economy

8) The Fed can influence long-term interest rates by
A) influencing the current one-year rate.
B) affecting people’s expectations of future short-term rates.
C) influencing the demand for money in the short run.
D) both A and B are correct
Answer: D

Topic: Appendix A: The Various Interest Rates in the U.S. Economy

9) Government securities that mature in less than a year are called
A) Federal funds bonds.
B) government bonds.
C) Federal Reserve bonds.
D) Treasury bills.
Answer: D

Topic: Appendix A: The Various Interest Rates in the U.S. Economy

10) What is the most widely followed short-term interest rate?
A) The federal funds rate
B) The three-month Treasury bill rate
C) The commercial paper rate
D) The government bond rate
Answer: B

Topic: Appendix A: The Various Interest Rates in the U.S. Economy

11) Government securities with terms of more than one year are called
A) Treasury bills. B) federal funds bonds.
C) capital bills. D) government bonds.
Answer: D

Topic: Appendix A: The Various Interest Rates in the U.S. Economy
12) The interest rate that banks are charged when they borrow reserves from other banks is the 
A) federal funds rate.  
B) AAA corporate bond rate.  
C) commercial paper rate.  
D) prime rate.  
Answer: A

13) The federal funds rate is a 
A) one-month rate.  
B) one-week rate.  
C) one-day rate.  
D) one-year rate.  
Answer: C

14) Federal funds are 
A) interbank loans.  
B) raised by taxes.  
C) loans that banks get from the Fed.  
D) bonds issued by the federal government.  
Answer: A

15) The rate that the Fed controls most closely through its open-market operations is the 
A) prime rate.  
B) federal funds rate.  
C) commercial paper rate.  
D) government bonds rate.  
Answer: B

16) The rate that the least risky firms pay on bonds that they issue is the 
A) prime rate.  
B) triple-A corporate bond rate.  
C) commercial paper rate.  
D) federal funds rate.  
Answer: B

2 True/False 
1) Federal funds rate is the tax rate on income.  
Answer: FALSE
Topic: Appendix A: The Various Interest Rates in the U.S. Economy

2) Commercial paper is a short term IOU of a corporation.
Answer: TRUE

Topic: Appendix A: The Various Interest Rates in the U.S. Economy

3) The two year interest rate is an average of the expected interest rate each of the two years.
Answer: TRUE

Topic: Appendix A: The Various Interest Rates in the U.S. Economy

4) The Fed can affect long term interest rates by affecting the expectations of people.
Answer: TRUE

Topic: Appendix A: The Various Interest Rates in the U.S. Economy

11.5 Appendix B: The Demand for Money: A Numerical Example

1 Multiple Choice
Refer to the information provided in Table 11.1 below to answer the questions that follow.

<table>
<thead>
<tr>
<th>Table 11.1</th>
<th>Number of switches</th>
<th>Average Money Holdings</th>
<th>Average Bond Holdings</th>
<th>Interest Earned</th>
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<td>$600</td>
<td>$40</td>
<td>$30</td>
</tr>
<tr>
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<td>$200</td>
<td>$50</td>
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<tr>
<td>3</td>
<td>$200</td>
<td>$0</td>
<td>$0</td>
<td></td>
</tr>
<tr>
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<td>$600</td>
<td>$800</td>
<td></td>
</tr>
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<td>8</td>
<td>$45</td>
<td>$45</td>
<td>$50</td>
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</tr>
</tbody>
</table>

1) Refer to Table 11.1. If it costs $11 each time a bond is sold, the optimal average money holdings are
A) $600. B) $400. C) $300. D) $200.
Answer: A
Topic: Appendix B: The Demand for Money: A Numerical Example

2) Refer to Table 11.1. If it costs $7 each time a bond is sold, the optimal average money holdings are
A) $600.
B) $400.
C) $300.
D) $200.
Answer: B

Topic: Appendix B: The Demand for Money: A Numerical Example

3) Refer to Table 11.1. If the period covered by Table 11.1 is one year, the interest rate paid on bonds
A) is 2%.
B) is 3%.
C) is 5%.
D) cannot be determined from this information.
Answer: C

Topic: Appendix B: The Demand for Money: A Numerical Example

4) Refer to Table 11.1. If it costs $9 each time a bond is sold, the optimal number of switches is
A) 1.
B) 2.
C) 3.
D) 4.
Answer: B

Topic: Appendix B: The Demand for Money: A Numerical Example

5) Refer to Table 11.1. If it costs $13 each time a bond is sold, the highest profit available is
A) $6.
B) $13.
C) $17.
D) $21.
Answer: C

Topic: Appendix B: The Demand for Money: A Numerical Example

6) Refer to Table 11.1. At a price of ________ the optimal number of switches is ________.
A) $7; 2
B) $9; 1
C) $11; 2
D) $13; 3
Answer: A

Topic: Appendix B: The Demand for Money: A Numerical Example

7) Refer to Table 11.1. At a price of ________ the optimal number of switches is ________.
A) $7; 1
B) $9; 3
C) $11; 1
D) $13; 0
Answer: C