# **Chapter 03 Bonds and Loanable Funds**

# **MULTICHOICE**

- **1.** Bonds are issued by
- (A) corporations only.
- (B) governments only.
- (C) many kinds of borrowers.
- (D) government agencies only.

Answer: (C)

- $\mathbf{2.}$  Three things fully describe the aspects of a bond. They are
- (A) the face value, the coupon rate, and the term to maturity.
- (B) the face value, the term to maturity, and the bond price.
- (C) the coupon rate, the term to maturity, and the issuer of the bond.
- (D) the face value, the coupon rate, and the bond price.

### Answer: (A)

- **3.** A 10-year, \$10,000 bond with a coupon rate of 5% is a promise by the issuer of the bond to
- (A) make a single payment to the bondholder of 10,500 in 10 years.
- (B) pay the bondholder \$5,000 every year for 10 years and also a \$10,000 payment in 10 years.
- (C) make a single payment to the bondholder of \$15,000 in 10 years.
- (D) pay the bondholder \$500 every year for 10 years and also a \$10,000 payment in 10 years.

### Answer: (D)

- 4. The face value of a bond is the
- (A) rate of interest to be paid to the holder of the bond.
- (B) original amount of money borrowed by the bond issuer.
- (C) length of time until the repayment of the bond principal.
- (D) issuer of the bond.
- Answer: (B)

- 5. The coupon rate of a bond refers to the
- (A) original amount of money borrowed by the bond issuer.
- (B) number of years until repayment of the bond principal.
- (C) discount offered to the bond purchaser.
- (D) interest rate to be paid to the holder of the bond.

### Answer: (D)

6. A bond's maturity refers to the

- (A) rate of interest to be paid to the holder of a bond.
- (B) amount that the bond issuer must repay.
- (C) period of time when the issuer of the bond makes repayment of the bond's principal.

(D) issuer of the bond.

### Answer: (C)

**7.** Shareen buys a 30-year, \$10,000 US Treasury bond with a coupon rate of 5%. After two years she needs some cash so she decides to sell her bond. Shareen will sell her bond in the \_\_\_\_\_\_ market.

(A) primary bond

- (B) Treasury bond
- (C) T-bond
- (D) secondary bond

Answer: (D)

 ${\bf 8.}$  You give your friend \$10,000 to help start a business, and you get \$1,000 back. Your rate of return is

(A) 100%.

(B) 50%.

(C) 10%.

(D) 1%.

Answer: (C)

9. You own a 10-year, \$10,000 US Treasury bond with a coupon rate of 3%. There are two years left

to maturity, and you are planning to sell the bond in the secondary market. If the interest rate is 5%, how much can you expect to get for the bond?

(A) \$10,600

(B) \$10,000

(C) \$9,628

(D) \$9,500

Answer: (C)

**10.** If the market interest rate is the same as the coupon rate on a newly issued bond, then the bond will sell

(A) at par.

(B) above par.

(C) below par.

(D) at a discount.

Answer: (A)

**11.** If the market interest rate is higher than the coupon rate on a newly issued bond, then the bond will sell

(A) at par.

(B) below par.

(C) above par.

(D) at a premium.

Answer: (B)

**12.** If the market interest rate is lower than the coupon rate on a newly issued bond, then the bond will sell

(A) at par.

(B) below par.

(C) above par.

(D) at a premium.

Answer: (C)

13. When a newly issued bond sells above its face value, it is said to sell

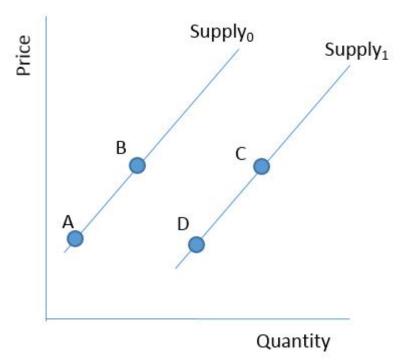
(A) below par value.

- (B) at par value.
- (C) at a discount.
- (D) at a premium.

Answer: (D)

- $\ensuremath{\textbf{14.}}$  Bond prices and interest rates are
- (A) directly related.
- (B) inversely related.
- (C) unrelated.
- (D) exponentially related.

Answer: (B)



### 15.

Consider the graph in Figure 3-1. An increase in the quantity supplied is best illustrated by a movement from

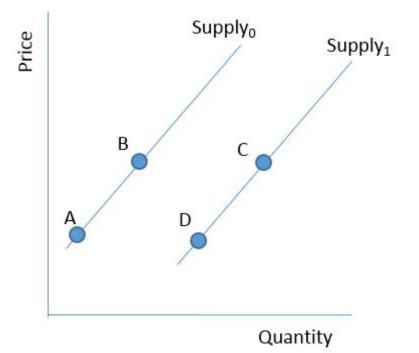
(A) A to B.

(B) A to C.

(C) B to D.

(D) C to D.

Answer: (A)



### 16.

Consider the graph in Figure 3-1. Which of the following best represents an increase in supply?

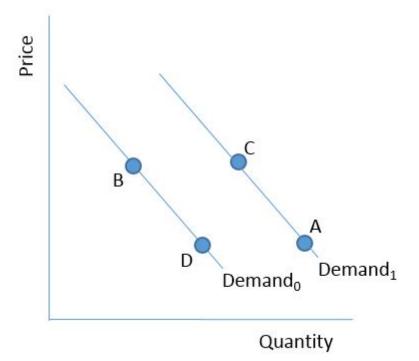
(A) The movement from A to B

(B) The movement from A to D

(C) The movement from C to B

(D) The movement from D to C

Answer: (B)

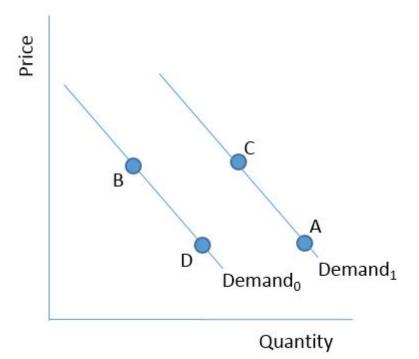




Consider the graph in Figure 3-2. Which of the following is considered a decrease in the quantity demanded?

- (A) The movement from B to C
- (B) The movement from A to C
- (C) The movement from B to D
- (D) The movement from A to B

Answer: (B)



#### 18.

Consider the graph in Figure 3-2. Which of the following is considered a decrease in demand?

(A) Tthe movement from B to C

(B) The movement from A to C

(C) The movement from B to D

(D) The movement from A to B

Answer: (D)

**19.** The supply of bonds is best described as a(n) \_\_\_\_\_\_ relationship between the price of bonds and the quantity of bonds supplied, all else equal.

- (A) inverse
- (B) direct
- (C) negative
- (D) exponential

#### Answer: (B)

**20.** The demand for bonds is best described as a(n) \_\_\_\_\_\_ relationship between the price of bonds and the quantity of bonds demanded, all else equal.

(A) linear

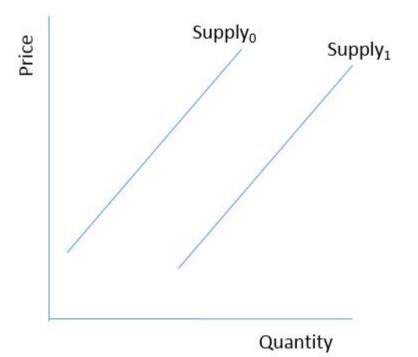
(B) positive

(C) direct

(D) inverse

Answer: (D)

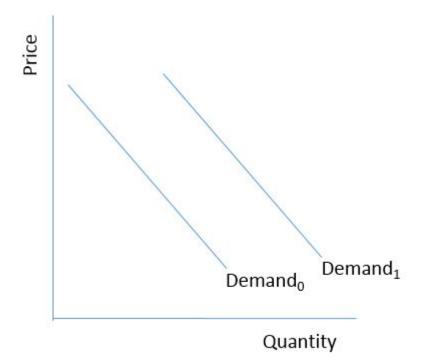
**21.** Consider the graph below. Which of the following occurrences will shift the supply of bonds from  $Supply_0$  to  $Supply_1$ ?



- (A) An expectation of deflation in the future
- (B) Federal government budget surpluses
- (C) A more optimistic outlook by business about the future
- (D) A reduction in investment tax credits available from government

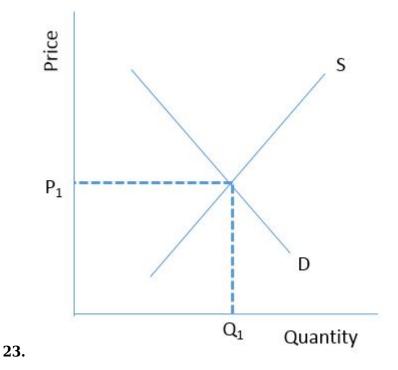
Answer: (C)

**22.** Consider the graph below. Which of the following would lead to a shift in the demand for bonds from  $Demand_1$  to  $Demand_0$ ?



- (A) A sudden and sustained decline in stock prices
- (B) A decrease in societal wealth
- (C) A decline in the cost of information about the bond market
- (D) A decrease in the default risk associated with bonds

Answer: (B)



Consider the bond market illustrated in the graph in Figure 3-3. If the current market price is higher than  $P_1$ , which of the following statements is true?

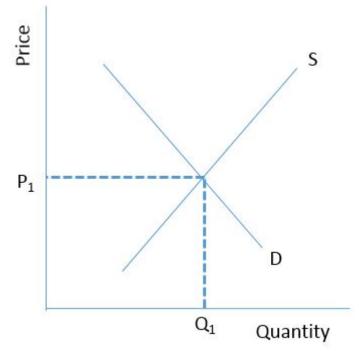
(A) There is a surplus of bonds in the market, and the market price will increase.

(B) There is a surplus of bonds in the market, and the market price will fall toward  $P_1$ .

(C) There is a shortage of bonds in the market, and the market price will fall toward  $P_1$ .

(D) There is a shortage of bonds in the market, and the price will increase.

Answer: (B)



### 24.

Consider the bond market illustrated in the graph in Figure 3-3. If the current market price is lower than  $P_1$ , which of the following statements is true?

(A) There is a surplus of bonds in the market, and the market price will increase.

(B) There is a surplus of bonds in the market, and the market price will fall toward  $P_1$ .

(C) There is a shortage of bonds in the market, and the market price will fall toward  $P_1$ .

(D) There is a shortage of bonds in the market, and the market price will increase.

### Answer: (C)

**25.** The quantity of loanable funds supplied is directly related to interest rates because as interest rates increase

(A) the opportunity cost of household consumption increases, causing households to bring more of their after-tax income to the pool of loanable funds.

(B) the opportunity cost to firms of funding projects with cash increases, causing firms to bring less of their cash to the pool of loanable funds.

(C) the opportunity cost of government borrowing increases, causing government to run budget surpluses instead of deficits and therefore bring more cash to the pool of loanable funds.

(D) in the US, savers in the rest of the world will be more inclined to save in their domestic market, thereby bringing less of their saving to the US pool of loanable funds.

Answer: (A)

 $\mathbf{26.}$  An increase in the supply of loanable funds could be caused by

(A) an increase in government deficits.

(B) a more optimistic outlook on the future by business.

(C) expansionary monetary policy being followed by the Federal Reserve.

(D) expectations of future inflation.

Answer: (C)

27. A decrease in the demand for loanable funds would be caused by

(A) lower expected household income.

(B) a deterioration in business confidence.

(C) a reduction in government deficits.

(D) a decrease in expectations about future inflation.

Answer: (D)

**28.** If the market for loanable funds is currently in equilibrium, a(n) \_\_\_\_\_\_ will cause an increase in the interest rate.

(A) increase in the household saving rate

(B) decrease in government budget deficits

(C) increase in business confidence

(D) expansionary monetary policy

Answer: (C)

# TRUEFALSE

**29.** A 5%, 10,000, 30-year bond will produce for the owner of the bond 30 annual payments of 500 from the issuer of the bond.

(A) True

(B) False

Answer: (B)

**30.** If the market interest rate exceeds the coupon rate on a bond, the selling price of the bond will be greater than the bond's face value.

(A) True

(B) False

Answer: (B)

**31.** An increase in the price of bonds will cause a decrease in the demand for bonds.

(A) True

(B) False

Answer: (B)

**32.** The market for bonds is a subset of the market for loanable funds.

(A) True

(B) False

Answer: (A)

# SHORTANSWER

**33.** How would you distinguish between the market for bonds and the market for loanable funds? **Answer :** The market for bonds represents a portion of the market for loanable funds. The loanable funds market is the market in which savers and borrowers come together. Another, but not the only, way in which savers and borrowers come together is the bond market. Savers and borrowers can also come together through banks, credit unions, and other types of financial markets.

**34.** What determines the market price of a bond?**Answer :** The market price of a bond is simply the present value of the cash flows the owner of the bond can expect to receive over the life of the bond. These cash flows are the interest payments based on the coupon rate and the principal or face value of the bond at maturity.

**35.** Explain how the market for loanable funds will adjust to the situation where the market interest rate is below the equilibrium rate. **Answer :** When the market interest rate is below the equilibrium rate, there will be a shortage of loanable funds. Borrowers who are trying to borrow at the market

rate will have trouble borrowing funds, and lenders willing to lend at the market rate will find that they do not have sufficient funds for all the borrowers interested in borrowing at the market rate. As a result, lenders will recognize an opportunity to raise the interest rate, and the interest rate will rise until it reaches the equilibrium rate.