2

Starting at the Beginning: Basic Security Investments

IN THIS PART . . .

Get familiar with basic securities — stocks and bonds, including municipal securities — that form the foundation of an investor's portfolio.

Review the registration procedure that securities go through before they can be sold to the public and find out which securities are exempt from registration.

Distinguish common stock from preferred stock, corporate bonds from U.S. bonds, and municipal bonds from general obligation bonds.

IN THIS CHAPTER

- Understanding the specifics of registering securities
- Knowing the types of offerings
- Spotting exempt securities
- Testing what you know

Chapter 5
Securities Underwriting: The Process and the Team Players

All issuers of securities need a starting point, just as all securities need a birth date (just not the kind that's celebrated with funny-looking hats and a cake). Most securities go through a registration procedure before the public can buy them. The SIE exam tests your ability to recognize the players and institutions involved in the registration process.

In this chapter, I cover topics related to bringing new issues (securities) to market. You find out about key players, types of securities offerings, kinds of securities that don't need to be registered, and other details about the underwriting process, where firms prepare to raise money from investors for issuers. At the end of the chapter, you get a chance to see how much you've learned by taking a quick exam.

Bringing New Issues to the Market

A lot of things need to happen before securities hit the market. Unless exempt (see later in this chapter) not only do the securities have to be registered, but also, the issuer has to find a broker–dealer (like your firm) to sell the securities to the public. The SIE exam tests your expertise in answering questions about this process.

Starting out: What the issuer does

For an entity to become a corporation, the corporate founders must file a document called a *corporate charter* (bylaws) in the home state of their business. Included in the corporate charter are the names of the founders, the type of business they're running or planning to run, the location of business, the number of shares (authorized shares) that can be issued, and so on. If a corporation wants to sell securities to the public, it has to register with states and the U.S. Securities and Exchange Commission (SEC). Read on for info on how the registration process works.

THE SECURITIES ACTS

Registration helps ensure that securities issued to the public adhere to certain regulations (though anti-fraud rules also apply to exempt securities). The following acts are designed to protect investors from unscrupulous issuers, firms, and salespeople. (See Chapter 16 for details on other rules and regulations.)

Securities Act of 1933: This act (also called the Truth in Securities Act, the Paper Act, the Full Disclosure Act, the Prospectus Act, and the New Issues Act) regulates new issues of corporate securities. An issuer of corporate securities must provide full and fair disclosure about itself and the offering. Included in this act are rules to prevent fraud and deception.

Securities Exchange Act of 1934: The Act of 1934, which established the SEC, was enacted to protect investors by regulating the over-the-counter (OTC) market and exchanges, such as the New York Stock Exchange (NYSE). (Chapter 14 tells you more about markets.) In addition, the Act of 1934 regulates

- The extension of credit in margin accounts (see Chapter 12)
- Transactions by insiders
- Customer accounts
- Trading activities

Trust Indenture Act: This act was originally known as the Trust Indenture Act of 1939 and prohibited bond issues valued at more than $5 million from being offered to investors without an indenture. The $5 million was subsequently raised to $50 million. A *trust indenture* is a written agreement that protects investors by disclosing the particulars of the issue (coupon rate, maturity date, any collateral backing the bond, and so on). As part of the Trust Indenture Act, all companies must hire a trustee who's responsible for protecting the rights of bondholders.

Registering securities with the SEC

Unless the securities are exempt from registration (see "Exempt securities" later in this chapter), when a company wants to go public (sell stock to public investors), it has to file a registration statement and a prospectus (see "Getting the skinny on the issue and issuer: The prospectus" later in this chapter) with the SEC.

The *registration statement* includes

- The issuer's name, address, and description of its business
- The company's articles of incorporation (unless previously supplied)
- The names and addresses of the underwriter(s) and all commissions or discounts they will receive from the sale, either directly or indirectly
- The price at which the security will be offered to the public
- The names and addresses of all the company's control personnel, such as officers, directors, and anyone who owns more than 10 percent of the corporation's securities (and how much they hold of the corporation's securities)
- The estimated net proceeds of the sale from the security to be issued and what the proceeds will be used for, including property (initially), or other businesses to be purchased (if any)
- The company's *capitalization* (all financing-related debt and equity)

- Complete financial statements, including balance sheets and income statements
- Any legal proceedings against the corporation that may affect it
- Any net proceeds derived from any security sold by the issuer in the previous two years, along with the underwriter's particulars
- The names and addresses of the attorneys who have vouched for the legality of the issue and a copy of their opinion(s) on the legality of the issue
- Any agreements or indentures that might affect the securities being offered


REMEMBER

The preceding information regarding the registration statement is known as *Schedule A,* and it typically applies to corporations issuing new securities. A *Schedule B* applies to local government issues (typically, municipal bonds). The information required when a local government issues securities is — as you can imagine — geared to what a local government would have to supply in its registration statement. Most of the information required is very similar; in fact, you can substitute *municipality* for *company* or *corporation* for most of the items required. You need to know the name of the borrowing government or subdivision, what it's raising the money for, the amount of funded (long-term) debt and the amount of unfunded (short-term) debt there will be after the new security is issued, whether the issuer has defaulted on debt in the past 20 years, the names of all people involved (in other words, attorneys, underwriters, and so on), commission to be paid to the underwriters, copies of the agreements made with the underwriters, a legal opinion made by the attorney with regard to the legality and possible tax-free nature of the issue, and so on.

Because the registration process to sell securities is a somewhat daunting and costly process for issuers, they may register more securities than they may need to sell now. *Shelf registration* (SEC Rule 415) allows issuers to sell securities that were previously registered with the SEC without additional permission. Shelf registration gives issuers up to three years (depending on their status) to sell previously registered shares.

Awaiting approval: The cooling-off period

After the issuer files a registration statement (the filing date) with the SEC, a 20-day cooling-off period begins. During the 20-day (and sometimes longer) period, the good old SEC reviews the registration statement. At the end of the cooling-off period, the issue will (ideally) be cleared for sale to the public (the effective date of registration). In the event that the registration statement must be amended or additional information is needed, the SEC issues a deficiency letter and halts the registration process until it receives the required information. If the SEC finds that the registration statement is misleading because the issuer included untrue statements of material fact or omitted a material fact, it issues a *stop order (deficiency letter)* which suspends the effectiveness of the registration statement. At this point, the issuer is required to amend the registration statement and answer any questions posed by the commission to continue the registration process.


REMEMBER

Neither the SEC nor any self-regulatory organization approves an issue. The SEC only clears the issue for sale. Also, the SEC is not responsible for making sure that the information included on the registration statement is complete, true, or accurate. As a matter of fact, it's unlawful to represent that the SEC approved of an issue or issuer (known as the No Approval Clause).

During the cooling-off period, the underwriter(s) can obtain indications of interest from investors who may want to purchase the issue. Agents scramble to get indications of interest from prospective purchasers of the securities.


REMEMBER

Indications of interest aren't binding on customers or underwriters. Customers always have the prerogative to change their minds, and underwriters may not have enough shares available to meet every prospective buyer's needs.

A *tombstone advertisement* — a newspaper ad that's shaped like . . . well, a tombstone (typically, rectangular with black borders) — is an announcement (but not an offer) of a new security for sale. It's the only advertisement allowed during the cooling-off period. These ads aren't required and don't have to be filed with the SEC. Tombstone ads contain a simple statement of facts about the new issue (the name of the issuer, type of security, number of shares or bonds available, underwriter's name, and so on). In addition, tombstone ads often provide investors information about how to obtain a prospectus. Tombstone ads may or may not include the price of the security being offered. Tombstone ads are the only form of advertisement allowed prior to the effective date, although they may appear after the effective date. They must contain a disclaimer stating that the advertisement isn't an offer to sell or a solicitation of an offer for any of these securities; this offer is made only through a prospectus.

Underwriters and selling group members use the *preliminary prospectus* to obtain indications of interest from prospective customers. The preliminary prospectus must be made available to all customers who are interested in the new issue during the cooling-off period. I talk more about what that prospectus has to include in "Getting the skinny on the issue and issuer: The prospectus" a little later in this chapter.

Holding the required due-diligence meeting

Toward the end of the cooling-off period, the lead underwriter holds a due-diligence meeting. This meeting is required by law. During this meeting, the underwriter provides information about the issue and what the issuer will use the proceeds of the sale for. This meeting is designed to provide such information to syndicate members (syndicate group or syndicate desk), selling group, brokers, analysts, institutions, and so on and allows them to ask questions.


REMEMBER

The last time syndicate members can back out of an underwriting agreement is toward the end of the cooling-off period (around the time of the due-diligence meeting). You can assume that if syndicate members are backing out, the reason is most likely negative market conditions.

Registering with the states: Blue skies

All *blue-sky laws* — state laws that apply to securities offerings and sales — say that to sell a security to a customer, the broker–dealer (brokerage firm), the registered representative, and the security must be registered in the customer's home state. The issuer is responsible for registering the security not only with the SEC, but also with the administrator in each state in which the securities are to be sold. Although the laws usually are quite similar, all states have their own securities laws, which are overseen by state securities regulators.

Here are the methods of state security registration:

- **Notification (registration by filing):** Notification is the simplest form of registration for established companies. Companies that previously sold securities in a state can renew their previous application.
- **Coordination:** This method involves registering with the SEC and states at the same time. The SEC helps companies meet the blue-sky laws by notifying all states in which the securities are to be sold. This type of registration is typically used for initial public offerings (IPOs).
- **Qualification:** Companies use this registration method for securities that are exempt from federal (SEC) registration but require registration with the state through the State Administrator.

Roll call: Introducing the team players

The following list explains who's involved in the securities registration and selling process. Registered reps can work for any of these firms:

- **Investment banking firm:** An *investment banking firm* is an institution (a broker–dealer) that's in the business of helping issuers raise money. You can think of investment bankers as being the brains of the operation. They help issuers raise money by providing advice for mergers, acquisitions, reorganizations, as well as selling securities. Because they help the issuer decide what securities to issue, how much to issue, the suggested selling price, and so on, they often underwrite the issue and become the managing underwriter in the offering of new securities.
- **Underwriter:** An *underwriter* is a broker–dealer who helps the issuer bring new securities to the public. They take the financial risk and, therefore, receive an extra fee for taking that risk. Underwriters purchase the securities from the issuer and sell them to the public for a nice profit. (Yippee!)
- **Syndicate (syndicate group or syndicate desk):** When an issue is too large for one firm to handle, the syndicate manager (managing underwriter) forms a *syndicate* to help sell the securities and relieve some of the financial burden on the managing underwriter. Each syndicate member is responsible for selling a portion of the securities to the public.
- **Managing (lead) underwriter:** The *managing underwriter* (syndicate manager) is the firm that's responsible for putting together a syndicate and dealing directly with the issuer. The managing underwriter receives financial compensation (bucketsof bucks) for every share sold.
- **Selling group:** In the event that the syndicate members need more help selling the securities, they can recruit selling group members. These members are brokerage firms that aren't part of the syndicate. Selling group members help distribute shares to the public but don't make a financial commitment (that is, don't purchase shares from the issuer) and, therefore, receive less money per share when selling shares to the public.

Although corporations could use a bidding process to pick the underwriter for new issues, they typically choose the underwriter directly. This type of offering is called a *negotiated offering.* Because municipal general obligation (GO) bonds are backed by the taxes of the people in the community, the issuers are most likely to choose a *competitive offering* (bidding process) to ensure that they're getting the best deal for taxpayers. (This topic is covered in more detail in Chapter 8.)

Signing an agreement among underwriters

When an issuer hires an underwriter (dealer) to sell its securities to the public, the parties must sign an underwriting agreement. The underwriting agreement outlines, among other things, the method of distribution (firm commitment, best efforts, or standby; more on these options in the upcoming paragraphs).

The underwriting agreement is a contract between the issuer of the securities and the managing or lead underwriter. It must be agreed on and signed before any securities can be sold to the public. Now, for SIE purposes, you don't need to know all the details about the underwriting agreement, but you should have a basic understanding of the types of underwritings: firm commitment and best efforts.

Committing to the deal: Firm-commitment underwriting

In a firm-commitment underwriting, the lead underwriter and syndicate members (other underwriters who may be helping in the sale of the securities) agree to purchase all the securities that

remain unsold after the offering. In this case, the underwriter assumes all the financial risk and becomes more like a dealer in the broker/dealer comparison.

Another type of firm commitment offering is a standby. A standby underwriter signs an agreement with the issuer to purchase any stock not purchased by the public if and when an issuer has a rights offering. (See Chapter 10 for more on that topic.)

Taking your best shot: Best-efforts underwriting

In a best-efforts underwriting, the underwriter agrees to make its best effort to sell all the securities to the public. (Hey, that's how underwriters make money.) If, however, the underwriter can't sell all the securities to the public, the issuer has the right to cancel the offering or take back some of the unsold securities, depending on the type of offering:

- **All-or-None (AON):** If the offering is set up as an AON agreement, all the securities must be sold by the deadline; otherwise, the deal is canceled, and the money must be returned to the investors.
- **Mini-max:** A mini-max offering is one in which a specified minimum number of securities must be sold in order for the deal not to be cancelled. If that minimum threshold is reached, more securities may be sold up to the maximum amount is reached. The issuer will take back any securities that remain unsold.

You should be aware that if securities are sold on a best-efforts basis, purchasers and potential purchasers must be made aware that the offering could be canceled. Purchasers' money is held in an escrow account until the terms are met or the deal is canceled. When the specified number of securities is sold, the underwriter releases the securities to the purchasers. If the underwriter doesn't sell enough of the securities by the deadline, the purchasers get their money back.


REMEMBER

According to FINRA, "A member, in the conduct of its business, shall observe high standards of commercial honor and just and equitable principles of trade." So regardless of whether the securities offered during an IPO are sold on a firm commitment or best-efforts underwriting, it must be a *bona fide offering* of the securities at the public offering price. Firms can't hold back securities for themselves, associates, immediate family members, industry insiders, portfolio managers, and so on.

Getting the skinny on the issue and issuer: The prospectus

The issuer prepares a preliminary prospectus (sometimes with the help of the underwriter) that's sent in with the registration statement. The preliminary prospectus must be available for potential purchasers when the issue is in registration (during the cooling-off period) with the SEC. The preliminary prospectus is abbreviated, but it contains all the essential facts about the issuer and issue except the final public offering price (POP) and the *effective date* (the date when the issue will first be sold). (A broker-dealer *may not* accept payment for a new issue until the registration becomes effective.)


REMEMBER

A preliminary prospectus is sometimes called a *red herring*, not because it smells fishy (or is totally misleading and irrelevant), but because a statement in red letters on the cover of the preliminary prospectus declares that it's not the final version and that some items may change in the meantime. The statement is often in the margin and elsewhere.

The *final prospectus*, which is prepared toward the end of the cooling-off period, is a legal document that the issuer prepares, containing material information about the issuer and new issue of securities. The final prospectus has to be available to all potential purchasers of the issue. It includes

- The final offering price
- The underwriters' *spread* (the profit the underwriters make per share)
- The *delivery date* (when the securities will be available)

Note: Because all mutual (open-end) funds, which I cover in Chapter 9, issue new securities constantly, they must always have a prospectus available. In addition, many mutual funds provide a *statement of additional information* (SAI), which provides more detailed information about the fund's operation that may be useful to some investors. A statement of additional information is also known as Part B of a fund's registration statement.

Counting the securities along the way

When a company issues securities that are traded in the market, someone has to be responsible for keeping track of the owners of the securities and someone has to make sure that the number of securities in the market isn't greater than it's supposed to be. These jobs are assigned to a registrar and a transfer agent:

- **Registrar:** The *registrar* is an independent financial institution that works along with a company's transfer agent to maintain a record of stock and bond owners. The main function of a registrar is to make sure that the outstanding shares don't exceed the amount of stock the issuer authorizes under its corporate charter or bylaws (rules the company lives by).
- **Transfer agent:** The *transfer agent* is a person or institution that maintains records of a corporation's stock and bond owners (much like a registrar) but also cancels and issues certificates as well as distributes dividends.


TIP

An easy way to keep these folks straight is to remember that a registrar is responsible for counting things, and a transfer agent is responsible for transferring or sending things.

Getting Up to Speed on the Types of Securities Offerings

Table 5-1 deals with the types of offerings that you (as a megabroker) should be familiar with. The offerings that follow usually require the services of an underwriter or underwriting syndicate to sell the securities to the public.

For unlisted IPOs (IPOs of non-NMS securities — securities that are not listed on an exchange or Nasdaq, in other words), a final prospectus needs to be available to all purchasers for 90 days after the effective date.

For IPOs of NMS securities (securities listed on an exchange or Nasdaq), a final prospectus must be available for 25 days after the effective date.

TABLE 5-1 Types of Securities Offerings

Type	Description	Who Benefits
Initial public offering	The first time an issuer sells stock to the public to raise capital; issuers usually hold back some stock for future primary offerings.	The bulk of the moolah raised goes to the issuer, and the rest goes to the underwriters.
Primary offering	An offering of new securities from a new issuer or an issuer that has previously issued securities; a company can have an initial public offering and several primary offerings if it wants to.	The proceeds of sale go to the issuer and underwriters.
Secondary offering	A sale of a large block of outstanding (stockholder-owned) securities or previously outstanding securities (Treasury stock, or stock the issuer has repurchased). Typically, one or more major stockholders of a corporation make the secondary offerings; new investors are essentially buying used, so the number of shares outstanding doesn't change.	The proceeds don't go to the issuer (except with Treasury stock); they go to the big shots who sell the securities.
Split (combined) offering	A combination of a primary and secondary offerings, with both new and outstanding securities.	A portion of the proceeds goes to the issuer, and a portion goes to the selling stockholders.

In the event that a member is acting as a dealer or has some other financial interest in recommending a security other than the commission received from the buyer, that fact must be disclosed in writing to the client at or before the completion of the transaction. So, in that regard, all buyers must be notified in writing if your firm is involved in a primary or secondary distribution of securities.

Reviewing Exemptions

Certain securities are exempt from registration because of the type of security or the type of transaction involved. You may find that those securities which are exempt because of who's issuing them are a bit easier to recognize. You'll probably have to spend a little more time on the securities that are exempt from registration because of the type of transaction.

Exempt securities

Certain securities are exempt from the registration requirements under the Securities Act of 1933. These securities come from issuers that either have a high level of creditworthiness, or it's the case that another government regulatory agency has some sort of jurisdiction over the issuer of the securities. These types of securities include

- Securities issued by the U.S. government (Treasury bills, Treasury notes, Treasury bonds, and so on) or federal agencies
- Municipal securities (local government bonds and notes)
- Securities issued by banks, savings institutions, and credit unions
- Public utility stocks or bonds
- Securities issued by religious, educational, or not-for-profit organizations
- Notes, bills of exchange, bankers' acceptances, and commercial paper (unsecured corporate debt securities with an initial maturity of 270 days or less)
- Insurance policies and fixed annuities

Fixed annuities are not securities and are exempt from SEC registration because the issuing insurance company guarantees the payout. Variable annuities require registration, however, because the payout varies depending on the performance of the securities held in the separate account. For more info on annuities and other packaged securities, see Chapter 9.

Exempt transactions

Some securities that corporations offer may be exempt from the full registration requirements of the Securities Act of 1933 due to the nature of the sale. The following list shows these exemptions:

- **Intrastate offerings (Rule 147):** An *intrastate offering* includes the *80% rule*. In order for a company to be eligible for the exemption, *at least 80%* of the corporation's *assets* must be in the state OR at least *80%* of *the company's revenues* must be generated from *in-state business* OR at least 80% of *money raised* from the offering must be used in the state of the offering. In addition, at least 50% of the company's employees must work in the state of the offering. The securities still require registration at the state level and 100% of the purchasers must be within the state.

  
  WARNING

  Don't confuse *intrastate* offerings (securities sold in one state) with *interstate* offerings (securities sold in many states). Interstate offerings do need SEC registration. To help you remember, think of an interstate roadway, which continues from one state to the next.

- **Regulation A (Reg A, Regulation A+, or Reg A+) offerings:** An offering of securities worth $20 million or less (Tier 1) or $75 million or less (Tier 2) within a 12-month period is Regulation A. Although this company may seem to be large to you, it's relatively small in market terms. Regulation A offerings are exempt from full registration requirements, but the issuer still has to file a simplified registration or abbreviated registration statement.

- **Regulation D (Reg D) offerings:** Also known as a *private placement* (private securities offering), a Regulation D offering is an offering to no more than 35 unaccredited (nonaccredited) investors per year. Companies that issue securities through private placement are allowed to raise an unlimited amount of money but are limited in terms of the number of unaccredited investors. Sales of Reg D securities are subject to the sales limitations set forth under Rule 144. All unaccredited (nonaccredited) investors must meet specific suitability requirements.

  Persons who do not match any of the items on the following list, would be considered unaccredited. The list of who or what is considered to be an *accredited investor* recently expanded to include the following:

  - Financial institutions (banks, insurance companies, pension funds, and so on)
  - Insiders of the private placement issuer (officers, directors, and/or owners of 10 percent or more of the outstanding shares, as well as their immediate family members)
  - Investors with a net worth of at least $1 million, excluding primary residence
  - Investors who have had a net income of at least $200,000 ($300,000 joint) for the previous two years and are expected to meet the requirement during the current year and going forward
  - Corporations, partnerships, or organizations with a net worth of at least $5 million
  - Reps who are registered and in good standing with the SEC, FINRA, and/or at least one state who have passed the Series 7, Series 65, Series 66, and/or Series 82 exam
  - Knowledgeable employees of private funds (hedge funds, private equity funds, and so on) who have the ability to raise money privately

- Rural business investment companies (investment companies that raise money to invest in small rural businesses)
- Limited liability companies (LLC) with more than $5 million in assets
- Family offices with at least $5 million in assets under management

» **Rule 144:** This rule covers the sale of restricted stock (such as stock sold through private placement), unregistered, and control securities (stock owned by control persons [affiliates], which includes directors, officers, or other people who own 10 percent or more of the issuer's voting stock). According to Rule 144, sellers of these securities must wait at least six months before selling the fully paid securities to the public. Additionally, the most an investor can sell at one time is 1 percent of the outstanding shares or the average weekly trading volume for the previous four weeks, whichever is greater.

» **Rule 144A:** This rule allows unregistered domestic and foreign securities to be sold to *Qualified Institutional Buyers* (QIBs) in the United States without a holding period. QIBs include insurance companies, registered investment companies, registered investment advisers, pension plans, corporations, partnerships, and so on.

To see if you are getting the hang of this, take a look at an example that deals with Rule 144.

EXAMPLE

John Bullini is a control person who purchased shares of restricted stock and wants to sell under Rule 144. John has paid fully for the shares and has held them for more than one year. There are 1.5 million shares outstanding. Form 144 is filed on Monday, May 28, and the weekly trading volume for the restricted stock is as follows:

Week Ending	Trading Volume
May 25	16,000 shares
May 18	15,000 shares
May 11	17,000 shares
May 4	15,000 shares
April 27	18,000 shares

What is the maximum number of shares John can sell with this filing?

(A) 15,000

(B) 15,750

(C) 16,200

(D) 16,250

The right answer is (B). The test writers often try to trick you on the SIE exam by giving you at least one week more than you need to answer the question. Because John has held the restricted stock for more than a year, John can sell 1 percent of the outstanding shares or the average weekly trading volume for the previous four weeks, whichever is greater:

$$1\% \times 1,500,000 \text{ shares outstanding} = 15,000 \text{ shares}$$

$$\frac{16,000 + 15,000 + 17,000 + 15,000}{4 \text{ weeks}} = \frac{63,000}{4 \text{ weeks}} = 15,750 \text{ shares}$$

WARNING

In this case, the previous four weeks are the top four in the list, but be careful, the examiners are just as likely to use the bottom four to give the table a different look.

Figure out 1 percent of the outstanding shares by multiplying the outstanding shares by 1 percent. (Easy, right?) In this case, you come up with an answer of 15,000 shares. The other possible answer is the average weekly trading volume for the previous four weeks. Add the trading volume for the previous four weeks (the top four in the chart) and divide by 4 to get an answer of 15,750 shares. Because you're looking for the greater number, the answer is (B).

Testing Your Knowledge

This chapter covers what you need to know about underwriting securities (at least as far as the SIE exam goes). When you're ready, use this section to attack some questions. Read carefully so that you don't make any careless mistakes and be sure to check your answers and understanding later in this section.

Practice questions

1. Which of the following agreements specify that any unsold securities are retained by the underwriters?

   I. Firm commitment

   II. All-or-none

   III. Best efforts

   IV. Mini-max

   (A) I only
   (B) II only
   (C) I, II, and IV
   (D) II, III, and IV

2. Which of the following are exempt transactions?

   I. Private placements

   II. Securities issued by the U.S. government

   III. Intrastate offerings

   IV. Commercial paper

   (A) I and III
   (B) I, II, and IV
   (C) II and IV
   (D) I, II, III, and IV

3. The trading volume for BBB Corporation for the previous five weeks is as follows:

   March 31: 50,000 shares

   March 24: 38,000 shares

   March 17: 44,000 shares

   March 10: 40,000 shares

   March 3: 42,000 shares

   BBB Corporation is listed on an exchange and has 4.2 million shares outstanding. What is the maximum number of shares an insider can sell under Rule 144 on April 4 of the following year?

   (A) 41,000
   (B) 42,000
   (C) 43,000
   (D) 44,000

4. Bullbear Broker–Dealer is managing an IPO that won't be on the NYSE, Nasdaq, or any exchange. How long after the effective date must Bullbear provide a final prospectus to all purchasers of the security?

   (A) 25 days
   (B) 40 days
   (C) 45 days
   (D) 90 days

5. A preliminary prospectus would include which of the following?

   I. An SEC disclaimer

   II. The names of the officers of the issuing corporation

   III. The public offering price

   IV. An explanation of what the funds raised by the offering would be used for

   (A) I and IV
   (B) I, II, and IV
   (C) II, III, and IV
   (D) I, II, III, and IV

6. Which federal law regulates the initial sale of stock to the public?

   (A) Securities Act of 1933
   (B) Securities Exchange Act of 1934
   (C) Trust Indenture Act
   (D) All of the above

7. Which of the following may be included in a tombstone advertisement?

   (A) The number of securities to be sold
   (B) The issuer's name
   (C) All underwriters' names
   (D) All of the above

8. The post-filing cooling-off period usually lasts about

   (A) 20 days
   (B) 30 days
   (C) 45 days
   (D) 90 days

9. At what point is a broker–dealer allowed to accept payment for a new issue?

   (A) After the customer has received the red herring
   (B) Once the registration is effective
   (C) During the cooling off period
   (D) As soon as the registration statement has been filed

10. All of the following securities are exempt from registration under the Securities Act of 1933 EXCEPT

    (A) Treasury bonds
    (B) general obligation bonds
    (C) Eurodollar bonds
    (D) ADRs

Answers and explanations

1. **A.** In a firm-commitment underwriting, all securities left unsold are retained by the underwriters. All-or-none and mini-max are actually best-efforts underwritings.

2. **D.** This one is tricky, because all the transactions are exempt. Regulation D private placements and intrastate offerings are exempt based on the type of transactions. But securities issued by the U.S. government and commercial paper are exempt based on the type of security.

3. **C.** Because the holding period has been met, the maximum number of shares that can be sold by an insider under Rule 144 is 1 percent of the outstanding shares or the average trading volume for the previous four weeks, whichever is greater. Check out the math:

$$1\% \times 4,200,000 = 42,000 \text{ shares}$$

$$\frac{50,000 + 38,000 + 44,000 + 40,000}{4 \text{ weeks}} = \frac{172,000 \text{ shares}}{4 \text{ weeks}} = 43,000 \text{ shares}$$

   In this case, the previous four weeks were the top ones on the list, but be careful; they're just as likely to be the bottom four. In this case, the answer is 43,000 shares because it's larger than 42,000.

4. **D.** For IPOs, a final prospectus must be available to all purchasers for 90 days after the effective date.

5. **B.** All the choices would be in the preliminary prospectus (red herring) except the final offering price. The offering price at this point hasn't been determined. The offering price, the underwriting spread, and the delivery date would be included in the final prospectus.

6. **A.** The Securities Act of 1933 (Truth in Securities Act, Paper Act, Full Disclosure Act, Prospectus Act, or New Issues Act) regulates new issues of corporate stocks and bonds. Included in the act are rules to prevent fraud and deception, as well as rules about the issuer's providing information about itself and the securities being offered.

7. **D.** Tombstone advertisements may include the name of the issuer, the type of security being offered, the offering price (or approximate offering price), the names of the underwriters, and the number of securities being offered.

8. **A.** The cooling-off period is when an issuer files a registration statement with the SEC. During this time, the SEC reviews the registration statement to see whether it needs to be amended or additional information is needed. It typically takes 20 days for the SEC to review the registration statement. This period is sometimes referred to as the *20-day cooling-off period*.

9. **B.** After the registration is effective (the effective date), the broker–dealer is allowed to accept payments for the new issue.

10. **D.** U.S. Treasury securities (Treasury bonds, Treasury notes, Treasury bills, TIPS, and so on), municipal bonds (general obligation bonds, revenue bonds, and so on), and Eurodollar bonds are exempt from SEC registration. U.S. Treasury securities are backed by the federal government, and municipal bonds are backed by a state or local government. Eurodollar bonds are dollar-denominated bonds issued in Europe, and, therefore, must register in the country of issue. ADRs (American Depositary Receipts) are receipts for foreign securities traded in the United States and, therefore, must be registered in the United States.

IN THIS CHAPTER

- Understanding the types of equity securities
- Comparing common stock with preferred stock
- Calculating certain values for stock questions
- Testing yourself

Chapter 6
Equity Securities: Corporate Ownership

Equity securities — such as common and preferred stock — represent ownership interest in the issuing corporation. All publicly held corporations issue common stock to investors. Investors love these securities because they've historically outperformed most other investments, so an average (or above-average, in your case) stockbroker typically sells more of these types of securities than any other kind.

The SIE exam tests your ability to recognize the types of equity securities and some other basic information. Although you may find that the SIE doesn't test you heavily on the info provided here, this chapter forms a strong foundation for many other chapters in the book, as well as a good base for other securities exams you may be taking after this one. For argument's sake, I think you'll find it difficult (if not impossible) to understand what an option or mutual fund is if you don't know what a stock is. Needless to say, even though this chapter is small, don't ignore it; if you do, it may come back to bite you.

At the end of this chapter, you can find some equity security questions to reinforce what is covered in this chapter. This section is where you get to shine.

Beginning with the Basics: Common Stock

Corporations issue common stock (as well as other securities) to raise business capital (money). As an equity security, common stock represents ownership of the issuing corporation. If a corporation issues 1 million shares of stock, each share represents one-millionth ownership of the issuing corporation. The market value of a common stock is based on the worth (or perceived worth) of the company — how many shares are outstanding, supply and demand, and so on.

Stockholders have a *right of inspection*. This means that they have the right to inspect some books and records of the issuer. These include a list of stockholders and the minutes of the stockholders' meetings. This information is typically available through an audited annual report.

Stockholders have *limited liability*. Stockholders' liability is limited to the amount invested. In other words, if a corporation that you invested in goes belly up (Chapter 11 bankruptcy), you lose only what you invested; nobody will come knocking on your door for additional bucks. If a corporation happens to go bankrupt, however, it must distribute any remaining assets in the following way (also known as the *order of liquidation*):

1. Unpaid workers
2. The Internal Revenue Service (IRS)
3. Secured creditors

   Secured creditors have issued loans that are secured with collateral, bonds, and so on.
4. General creditors

   General creditors have issued unsecured loans, which aren't secured with collateral (bank loans, accounts payable, debentures, and so on).
5. Subordinated debentures

   Subordinated debentures are junior unsecured bonds; holders of subordinated debentures are the last creditors to be paid in the event of corporate bankruptcy.
6. Preferred stockholders
7. Common stockholders


REMEMBER

Common and preferred stockholders would get paid after the creditors (if there's any money left). Common stockholders have what are known as *residual rights*, which means that they're the last to get paid in the event of corporate bankruptcy. Bonds and preferred stock are considered to be *senior securities* in relationship to common stock.

Understanding a shareholder's voting rights

One of the most basic rights that most common stockholders receive is voting rights, although certain corporations will issue *nonvoting common stock* in rare circumstances, sometimes to protect their board of directors. But nonvoting stock is not as attractive to investors who like to have some control of who's running the company. Most preferred stock, however, is nonvoting. (See "Getting Preferential Treatment: Preferred Stock" later in the chapter.)

When investors have voting rights, every so often a corporation may have those investors vote to change members of the board of directors. Although investors may be able to vote on other issues, such as stock splits (see "Splitting common stock" later in this chapter), the SIE focuses on voting to change board members.

Because having all stockholders attend the annual corporate meeting to vote would be difficult, stockholders usually vote by *proxy* — absentee ballot, in other words. (See "Proxies: Voting by mail" later in this chapter.)

Statutory (regular) voting

Statutory, or regular, voting is the most common type of voting that corporations offer their shareholders. This type of voting is quite straightforward. Investors receive one vote for every

share they own, multiplied by the number of positions to be filled on the board of directors (or issues to be decided). But investors have to *split the votes evenly* for each item on the ballot.

If an investor owns 500 shares (and decides to vote), and four positions need to be filled on the board of directors, the investor has a total 2,000 votes (500 × 4), which the investor must split evenly among all open positions (500 each). The investor votes yes or no for each candidate.

Cumulative voting

Cumulative voting is a little different from statutory voting. Although the investor still gets the same number of overall votes as in statutory voting, the stockholder can vote the shares in any way they see fit. Cumulative voting gives smaller shareholders (in terms of shares) an easier way to gain representation on the board of directors.

If an investor owns 1,000 shares, and three positions on the board of directors are open, the investor has a total of 3,000 votes (1,000 shares × 3 candidates), which the investor can use to vote for any candidate(s) in any way they see fit.

REMEMBER

Cumulative voting doesn't give an investor more voting power — just more voting flexibility. The only way to get more voting power is to buy more shares.

Try your hand at the following cumulative voting question.

EXAMPLE

Under cumulative-voting rules, an owner of 1,000 shares of DEF common stock who is voting for four members on the DEF board of directors could cast:

(A) 1,000 votes for each of the four candidates

(B) 3,500 votes for one candidate and split the remaining votes over the other three positions

(C) 4,000 votes for one candidate

(D) All of the above

The answer you're looking for is (D). Cumulative voting allows investors to split their votes in any way. In this case, an owner of 1,000 shares of DEF common stock voting for four members on the board of directors would have a total 4,000 votes (1,000 shares × 4 board positions). So (A), (B), and (C) are all possibilities. Under statutory voting, the only way the investor could vote is (A).

Proxies: Voting by mail

Regardless of whether a corporation offers statutory or cumulative voting, when a corporation requires a vote on certain issues — such as splitting its stock, voting for members on the board of directors, and so on — shareholders (because they're owners) are allowed to vote unless the corporation issued nonvoting stock (Class B shares). Certainly, the more shares you own, the more voting power you have.

Now, suppose that you live in New York City, and the vote is taking place in Los Angeles. What do you do? Well, short of taking a trip across the country, you can vote by proxy (basically, an absentee ballot). The issuer will send you a proxy, which describes the issue(s) to be voted on. You can check the box describing how you want to vote and mail the proxy back. By doing that, you're authorizing (giving limited power of attorney to) another person to vote according to your wishes. A *transfer agent* is responsible for sending out proxies.

A *proxy fight* or *proxy battle* is an unfriendly event that occurs when a group of stockholders of a corporation decide to vote together to gain control of the corporation. This situation usually happens when the stockholders aren't happy with the way the corporation is being run. Typically, they're trying to replace members of the board of directors or people in management positions.

Categorizing shares corporations can sell

All publicly held corporations have a certain quantity of shares that they can sell based on their corporate charter. These shares are broken into a few categories, depending on whether the issuer or investors hold the shares:

- **Authorized shares:** *Authorized shares* are the number of shares of stock that a corporation can issue. The issuer's bylaws or *corporate charter* (a document filed with the state that identifies the names of the founders of the corporation, the company's objectives, and so on) states the number of shares the company is authorized to sell. The issuer usually holds back a large percentage of the authorized stock, which it can sell later as needed through a primary offering. (See Chapter 5 for details on offerings.) In the event that the issuer wishes to sell more shares than were previously authorized, the issuer's corporate charter would have to be updated, which would require a vote by stockholders.
- **Issued shares:** *Issued shares* are the portion of authorized shares that the issuer has actually sold to the public to raise money, including shares owned by founding shareholders. Logically, the portion of authorized shares that hasn't been issued to the public is called *unissued shares.* Unissued shares do not carry the rights and privileges of issued shares. Under SEC Rule 415, shares may be kept unissued for up to two or three years (shelf registration). (See Chapter 5 for more on this topic.)
- **Outstanding shares:** Outstanding shares are the number of shares that are in investors' hands. This quantity may or may not be the same number as the issued shares. At times, an issuer may decide to repurchase its stock in the market for numerous reasons, including to help increase the demand (and the price) of the stock trading in the market or to avoid a *hostile takeover* (when another company is trying to gain control of the issuer). Stock that the issuer repurchases from the outstanding shares is called *treasury stock.* Only the issuer can own treasury stock; stock owned by the CEO or founders is considered part of the outstanding stock.

  The standard formula for outstanding shares is

  $$\text{outstanding} = \text{issued} - \text{treasury}$$

Here's a quick question about calculating outstanding shares. See how you do:

EXAMPLE

DEF Corp. has 20,000,000 shares of authorized stock. DEF has issued 15,000,000 shares and has since repurchased 1,500,000 shares. How many shares are outstanding?

(A) 13,500,000

(B) 15,000,000

(C) 16,500,000

(D) 20,000,000

The answer you're looking for is (A). Using the numbers given, you see that the corporation has 20,000,000 shares of authorized stock but has issued only 15,000,000. Since that time, the corporation has repurchased 1,500,000 shares (Treasury stock), so the number of outstanding shares is 13,500,000. Here's the equation:

$$\text{outstanding} = \text{issued} - \text{Treasury}$$
$$\text{outstanding} = 15,000,000 - 1,500,000 = 13,500,000$$

Establishing the par value of common stock

Par value (nominal or original value) for common stock is more or less a bookkeeping value for the issuer. Although issuers may set the par value at $1 (or 1 cent, $5, $10, or whatever), the market

price is usually much more. A common stock's par value *has no relationship* with the market price of the stock. Although much rarer, some companies even issue stock with no par value. Par value for common stock isn't as important to investors as it is to bondholders and preferred stockholders (see "Considering characteristics of preferred stock" later in this chapter).

REMEMBER

The amount over par value that an issuer receives for selling stock is called *additional paid-in capital*, *paid-in surplus*, or *capital in excess of par.*

The *stated par value* is printed on the stock certificate; it may change as the result of corporate actions such as a stock split (see "Splitting common stock" later in this chapter). An issuer can also issue *no par value stock* (stock issued without a stated par value); in this case, the stock has a stated value that the corporation uses for bookkeeping purposes. A lack of par value doesn't affect investors.

Considering corporate actions

Besides just attempting to build their business, corporations may take other actions that affect the price of their securities. They can split their stock (see the next section, "Splitting common stock"); reverse-split their stock (see the section "Reverse stock splits"); or engage in buybacks, tender offers, exchange offers, rights offerings (see the later section "Rights: The right to buy new shares at a discount"), mergers, or acquisitions.

Here are some of the corporate actions:

- **Buybacks:** A buyback happens when a cash-rich corporation repurchases some of its own shares in the market, turning them into treasury stock. Buybacks typically increase the market value of the underlying security. After a successful buyback, fewer shares are outstanding.
- **Tender offers:** A tender offer occurs when a corporation, person, or group attempts to gain control (make a *takeover bid*) of a corporation (the *target corporation*). A tender offer is typically announced in financial publications, and the offer will be at a premium to the market value of the securities. Tender offers are good for a specified period and specified minimum number of holders of shares (in other words, holders of more than 50 percent of the outstanding shares of the target corporation) must agree; otherwise, the offer is canceled. Tender offers increase the market price of the securities being targeted.
- **Exchange offers:** Sometimes, a corporation decides to exchange some of its securities for other ones. A corporation may offer its bondholders the right to exchange certain debt securities for stock to reduce the corporation's debt. Or a corporation may offer to exchange 4 percent bonds due to mature in 2 years with 5 percent bonds due to mature in 20 years, thus extending the amount of time the corporation has to pay back its debt.
- **Mergers:** Two existing corporations may decide to merge their two companies, often to gain market share, expand one corporation's reach, or possibly to expand into new segments. Mergers typically have a positive impact on investors.
- **Acquisitions:** Compared with a merger, in which two corporations work together to make one big corporation, an acquisition happens when a larger corporation takes control of a smaller one or a portion of another corporation. For one corporation to acquire another, it must obtain majority ownership of the target corporation.

TIP

As you can imagine, in the event of a corporate action such as a stock split, a merger, an acquisition, and so on, investors of the securities must be notified. For public companies listed on an exchange such as the New York Stock Exchange (NYSE), the exchanges handle notification of clients and make the information available online. If the securities trade over the counter (OTC), the Financial Industry Regulatory Authority (FINRA) is responsible for handling the announcement.

Splitting common stock

You may ask "Why would a company split its stock?" Obviously in addition to showing investors that their company is growing, it also makes the market price of the security more attractive. The normal unit of trading is 100 shares of stock *(a round lot)*, and if the share price of a security gets too high, the number of investors who can purchase it becomes limited. If Microsoft had never split its stock (which it has done nine times, all 2-for-1 or 3-for-2, the last time being in 2003), a round lot would cost investors close to $10 million. Know a lot of investors who could afford that?

Alternatively, companies may use a *reverse-split*, consolidating shares to raise the price of the stock and perhaps keep the price of their stock from dropping too low and possibly face being delisted. The next couple of sections take you through splits so that you know them forward and backward.


REMEMBER

Stockholders can vote on stock splits. (Refer to "Understanding a shareholder's voting rights" earlier in the chapter, for info on types of voting.) Be aware that after a stock split, investors may have more or fewer votes, but they still hold the same percentage of votes. When a company splits its stock, the number of authorized shares needs to be changed on the *corporate charter* (refer to "Categorizing shares corporations can sell" earlier in this chapter).

Forward stock splits

During a *forward stock split, or simply split,* the number of shares increases, and the price decreases without affecting the total market value of the outstanding shares. After a company forward-splits its stock, investors receive additional shares, but the market price (and par value) per share drops. A forward split may be *even* (2-for-1, 3-for-1, 4-for-1, and so on) or *uneven* (3-for-2, 5-for-3, 5-for-2, and so on). You'll find that whether the forward split is even or uneven, the same formula works. Check out the following equations, in which *A* represents the first number and *B* represents the second number.

Use the following calculations to figure out an investor's position after an *A*-for-*B* split:

$$\text{shares after a split} = \text{shares} \times \frac{A}{B}$$

$$\text{price after a split} = \text{stock price} \times \frac{B}{A}$$

The following question tests your ability to answer a forward-stock-split question.


EXAMPLE

Bob Billingham owns 1,200 shares of DEF common stock at a current market price of $90 per share. If DEF splits its stock 3-for-1, what would Bob's position be after the split?

(A) 400 shares at $270 per share

(B) 400 shares at $90 per share

(C) 3,600 shares at $33.33 per share

(D) 3,600 shares at $30 per share

The answer you're looking for is (D). A forward stock split, like a 3-for-1, increases the number of shares and decreases the price of the stock, so you can immediately cross off (A) and (B). Choice

(C) doesn't work because the price of the stock would have to be 1/3 of $90, which is $30, not $33.33. Now check your work:

$$1,200 \text{ shares} \times \frac{3}{1} = 3,600 \text{ shares}$$

$$\$90 \times \frac{1}{3} = \$30$$


TIP

A good way to double-check your work is to make sure that the overall value of the investment doesn't change after the split. Using the example, Bob had $108,000 worth of DEF ($1,200 \text{ shares} \times \$90$) before the split, and after the split, Bob has $108,000 worth of DEF ($3,600 \text{ shares} \times \$30$).

Reverse stock splits

A reverse stock split has the opposite effect on a security from a forward split. In a reverse-split, the market price of the security increases, and the number of shares decreases. As with forward stock splits, the overall market value of the securities doesn't change. A company may reverse-split its stock if the market price gets too low, which may make potential investors think that the company has a problem.

In the event of a reverse-split, investors usually have to send their old shares to the transfer agent to receive the new shares. If a company were executing a 1-for-3 reverse-split, investors would receive one new share for every three they sent in.


TIP

You can use the same formula to determine an investor's position after a reverse-split that you use for forward splits.

The following question tests your ability to answer a reverse-stock-split question.


EXAMPLE

Betty Billings owns 3,600 shares of GHI common stock at a current market price of $2 per share. If GHI reverse-splits its stock 1-for-5, what would Betty's position be after the split?

(A) 600 shares at $10 per share

(B) 720 shares at $10 per share

(C) 18,000 shares at 40 cents per share

(D) 18,000 shares at $10 per share

The correct answer is (B). In a reverse-split, the number of shares has to decrease and the price has to increase, so you can immediately eliminate (C) and (D). Choice (A) doesn't work because the investor would end up with too few shares. Check your work:

$$3,600 \text{ shares} \times \frac{1}{5} = 720 \text{ shares}$$

$$\$2 \times \frac{5}{1} = \$10$$

Sharing corporate profits through dividends

If a corporation is profitable (and the board of directors is in a good mood), the board of directors may decide to issue a stock dividend to investors. If and when the corporation declares a dividend, each shareholder is entitled to a *pro rata* share of dividends, meaning that every shareholder

receives an equal proportion for each share that they own. The SIE exam expects you to know the forms of dividends an investor can receive and how the dividends affect both the market price of the stock and an investor's position. Although the investor can receive dividends in cash, stock, or *property forms* (stock of a subsidiary company or sample products made by the issuer), I focus on cash and stock dividends because those scenarios are more common.

REMEMBER

Investors can't vote on dividends; instead, the board of directors decides dividend payouts. You can imagine that if this decision were left in the investors' hands, they'd vote for dividends weekly! For more info on voting, refer to "Understanding a stockholder's voting rights" earlier in this chapter. Even profitable companies may not pay a cash dividend because they may want to reinvest profits back in the company.

Cash dividends

Cash dividends are a way for a corporation to share its profits with shareholders. When an investor receives cash dividends, the payout is a taxable event. Corporations aren't required to pay dividends, but dividends provide a good incentive for investors to hold onto stock that isn't experiencing much growth. Although cash dividends are nice, the market price of the stock falls on the *ex-dividend date* (the first day the stock trades without a dividend) to reflect the dividend to be paid on the payment date announced:

$$\text{stock price} - \text{dividend} = \text{price on ex - dividend date}$$

Try your hand at answering a cash-dividend question.

EXAMPLE

The closing price for ABC stock is $49.50 on the day before the ex-dividend date. If ABC previously announced a dividend of 75 cents, what will the next day's opening price be?

(A) $48.25

(B) $48.75

(C) $49.50

(D) $50.25

The correct answer is (B). Check your work:

$$\$49.50 - \$0.75 = \$48.75$$

The math's as simple as that. Because now stocks are trading in pennies instead of eighths, as they used to, calculating the price on the ex-dividend date is a snap.

Stock dividends

Stock dividends are just like forward stock splits in that the investor receives more shares of stock (refer to "Splitting common stock" earlier in this chapter), but the corporation offers a percentage dividend (5 percent, 10 percent, and so on) instead of splitting the stock 2-for-1, 3-for-1, or whatever. Unlike cash dividends, stock dividends aren't taxable to the stockholder because the investor's overall value of investment doesn't change.

The primary reason for a company to give investors a stock dividend is to make the market price more attractive to investors (if the market price gets too high, it limits the number of investors who can purchase the stock), thus adding *liquidity* (ease of trading) to the stock.

The following question tests your expertise in answering stock-dividend questions.

EXAMPLE

Alyssa H. owns 400 shares of OXX common stock at $33 per share. OXX previously declared a 10 percent stock dividend. Assuming that there's no change in the market price of OXX before the dividend, what is Alyssa's position after the dividend?

(A) 400 shares at $30

(B) 440 shares at $33

(C) 400 shares at $36.30

(D) 440 shares at $30

The answer you want is (D). In this case, you can find the answer without doing any math. Because the number of shares increases, the price of the stock has to decrease. Therefore, the only answer that works is (D). I can't guarantee that you'll get a question for which you don't have to do the math, but don't rule it out; scan the answer choices before pulling out your calculator.

Anyway, here's how the numbers work. You have to remember that the investor's overall value of investment doesn't change. Alyssa gets a 10 percent stock dividend, so she receives 10 percent more shares. Now Alyssa has 440 shares of OXX (400 shares + 40 shares [10 percent of 400]). Next, you need to determine her overall value of investment:

$$400 \text{ shares} \times \$33 = \$13,200$$

Because the overall value of investment doesn't change, Alyssa needs to have $13,200 worth of OXX after the dividend:

$$\frac{\$13,200}{440 \text{ shares}} = \$30 \text{ per share}$$

Alyssa's position after the split is 440 shares at $30 per share.

REMEMBER

When you or one of your clients own securities subject to corporate actions such as splits, stock dividends, mergers, and so on, the securities are going to change. In some cases, such as forward stock splits and stock dividends, you or your client will receive more shares at a lower cost basis, and the cost basis of the shares held will be lowered accordingly. The adjustment to the cost basis is important for tax purposes when determining the amount of capital gains or losses.

For argument's sake, suppose that you purchased 1,000 shares of UPPP Corporation at $40 per share. In this case, you have stock with a cost basis of $40,000 (1,000 shares at $40 per share). If the stock splits 2 for 1, you have 2 shares for every 1 purchased. The corporation isn't just giving you another $40,000 worth of stock; it cut the price in half to adjust for the split. As the market price gets cut in half, so does the cost basis per share. In the example, now you have 2,000 shares with a cost basis of $20 per share ($40,000 cost basis) even if the market value is $55,000. In the event of a split, the issuer would adjust your shares to reflect a lower par value. In the event of an exchange offer, merger, or acquisition, the security that you're holding would likely change. In this case (assuming that you physically held the security), the issuer would be responsible for mailing the new security. Whether the securities are physically held, which is becoming increasingly rare, or in book-entry form, the issuer must update its books for any changes.

Getting Preferential Treatment: Preferred Stock

Equity securities represent shares of ownership in a company, and debt securities represent . . . well, debt. (See Chapters 7 and 8 for info on debt securities.) Although preferred stock (sometimes called *preferreds*) has some characteristics of both equity and debt securities,

preferred stock is an equity security because it represents ownership of the issuing corporation the same way that common stock does.

Considering characteristics of preferred stock

One advantage of purchasing preferred stock instead of common stock is that preferred shareholders receive money back (if any is left) before common stockholders do if the issuer reorganizes. The main difference between preferred stock and common stock, however, has to do with dividends. Issuers of common stock typically pay a cash dividend only if the company is in a position to share corporate profits based on a vote by the board of directors. By contrast, issuers of preferred stock typically pay consistent cash dividends. In the event that a corporation's profits are lagging or they are losing money, they may reduce or stop the dividend payments. Preferred stock generally has a par value of $100 per share (although it could be $50, $25, and so on) and tends to trade in the market much closer to its par value than common stock does.

Because preferred stocks receive (or are supposed to receive) a consistent dividend, they're somewhat like debt securities receiving interest. Because of that similarity, like debt securities (bonds), many preferred stocks are rated by rating agencies such as Moody's, Standard & Poor's, and Fitch. (For more on rating agencies, see Chapter 7.)

Some of the drawbacks of investing in preferred stock instead of common stock are the lack of voting rights, the sometimes-higher cost per share, and lack of growth. You can assume for SIE exam purposes that preferred stockholders don't receive voting rights unless they fail to receive their expected dividends. (A few other exceptions exist, but you don't need to worry about them now.) Also, because most preferred stock pays consistent dividends, the market price will increase or decrease depending on prevailing interest rates similar to debt securities.


REMEMBER

If the issuer can't make a payment because earnings are low, and if the preferred stock is *cumulative* (see "Getting familiar with types of preferred stock," the next section in this chapter), owners are still owed the missing dividend payment(s). The dividend (sharing of profits) that preferred stockholders receive is based on par value. Thus, although par value may be nothing more than a bookkeeping value when you're dealing with common stock, par value is definitely important to preferred stockholders.

To calculate the annual dividend, multiply the percentage of the dividend by the par value. If a customer owns a preferred stock that pays a 6 percent dividend, and the par value is $100, set up the following equation:

$$6\% \text{ preferred stock} \times \$100 \text{ par} = \$6 \text{ per year in dividends}$$

If the issuer were to pay this dividend quarterly (once every three months), an investor would receive $1.50 ($6/4) every three months for each share owned.


REMEMBER

When working on a dividend question on preferred stock, you need to look for the par value in the problem. Par value normally is $100, but it could be $25, $50, and so on.

Getting familiar with types of preferred stock

You need to be aware of several types of preferred stock for the Series 7. This section gives you a brief explanation of the types. Some preferred stock may be a combination of types, as in cumulative convertible preferred stock. Here are the distinctions between noncumulative and cumulative preferred stock:

- **Noncumulative (straight) preferred:** This type of preferred stock is rare. The main feature of preferred stock is that investors typically receive a consistent cash dividend. In the event that the issuer doesn't pay the dividend, the company usually still owes it to investors. This isn't the case for noncumulative preferred stock. If the preferred stock is noncumulative, and the issuer fails to pay a dividend, the issuer doesn't owe it to investors. An investor may choose noncumulative preferred stock over common stock because the company is still supposed to pay a consistent cash dividend and, in the event of corporate bankruptcy, preferred stockholders still get paid before common stockholders. Because noncumulative preferred stock is riskier for investors, they're typically offered a higher dividend.
- **Cumulative preferred:** Cumulative preferred stock is more common. If an investor owns cumulative preferred stock and doesn't receive an expected dividend, the issuer is in arrears and still owes that dividend. Before paying a common dividend, the issuer first has to make up all delinquent payments to cumulative preferred stockholders, then other preferred shareholders. As such, cumulative preferred stock is a safer investment than noncumulative preferred stock.


REMEMBER

Because preferred stock is senior to common stock, if the issuer misses a dividend payment to preferred stockholders, the issuer can't make a dividend payment to its common stockholders until the preferred dividend payments resume.

The following question tests your understanding of cumulative preferred stock.


EXAMPLE

An ABC investor owns 8 percent cumulative preferred stock ($100 par). In the first year, ABC paid $6 in dividends; in the second year, it paid $4 in dividends. If a common dividend is declared the following year, how much must the preferred shareholders receive?

(A) $6

(B) $8

(C) $12

(D) $14

The right answer is (D). Because ABC is cumulative preferred stock, issuers have to catch up preferred stockholders on all outstanding dividends before common shareholders receive a dividend. In this example, the investor is supposed to receive $8 per year in dividends ($8 \times \$100\,\text{par}$). In the first year, the issuer shorted the investor $2; in the second year, $4. The investor hasn't yet received payment for the following year, so they are owed $8. Add up these debts:

$$\left(\$8 - \$6\right) + \left(\$8 - \$4\right) + \$8 = \$2 + \$4 + \$8 = \$14$$

All preferred stock has to be either cumulative or noncumulative. Both types may have other features, including the capability to turn into other kinds of stock, offerings of extra dividends, and other VIP treatment. I run through some of these traits in the list that follows:

- **Convertible preferred:** Convertible preferred stock allows investors to exchange their preferred stock for common stock of the same company at any time. Because the issuers are providing investors another way to make money, investors usually receive a lower dividend payment than with nonconvertible preferred stock.

  The *conversion price* is the dollar price at which a convertible preferred stock par value can be exchanged for a share of common stock. When the convertible preferred stock is first issued, the conversion price is specified, based on the preferred's par value. The *conversion ratio* tells you the number of shares of common stock that an investor receives for converting one share of preferred stock.

You can use the following conversion ratio formula for convertible preferred stock and also for convertible bonds (see Chapter 7 for info on convertible bonds):

$$\text{conversion ratio} = \frac{\text{par value}}{\text{conversion price}}$$


REMEMBER

The conversion ratio helps you determine a *parity price* at which the convertible preferred stock and common stock would be trading equally. Suppose that you have a convertible preferred stock that's exchangeable for four shares of common stock. If the convertible preferred stock is trading at $100, and the common stock is trading at $25, they're on parity because four shares of stock at $25 equal $100. If there's a disparity in the exchange values, however, converting may be profitable. If the convertible preferred stock is trading at $100, and the common stock is trading at $28, the common stock is trading above parity; converting would be profitable because investors are exchanging $100 worth of securities for $112 worth of securities ($\$28 \times 4$). Convertible preferred stock typically trades very close to the parity price.

- **Callable preferred:** Callable preferred stock allows the issuer to buy back the preferred stock at any time after a defined date at the price (the *call price*) on the certificate. This stock is a little riskier for investors because they don't have control of how long they can hold the stock, so corporations usually pay a higher dividend on callable preferred stock than on regular preferred stock. A call feature may be added to other types of preferred stock such as callable convertible preferred.
- **Participating preferred:** Although rarely issued, participating preferred stock allows the investors to receive common dividends in addition to the usual preferred dividends up to a certain amount. Most preferred stock is non-participating, meaning that they don't receive common dividends, only preferred dividends.
- **Prior (senior) preferred:** Your run-of-the-mill preferred stockholders receive compensation before common stockholders in the event of corporate bankruptcy. Senior preferred stockholders, however, receive compensation even before other preferred stockholders. Because of the extra safety factor, senior preferred stock pays a slightly lower dividend than other preferred stock from the same issuer.
- **Adjustable (variable- or floating-rate) preferred:** Holders of adjustable preferred stock receive a dividend that's reset every three months to match movements in the prevailing interest rates. Because the dividend adjusts to changing interest rates (usually based off of a certain benchmark such as the T-bill rate), the stock price remains more stable.

Securities with a Twist

Some securities fall outside the boundaries of the more normal common and preferred stock, but I still include them in this equities chapter because they involve ownership in a company or the opportunity to get it. This section gives you an overview of those special securities.

Opening national borders: ADRs

American Depositary Receipts (ADRs) are receipts for foreign securities traded in the United States. ADRs are negotiable certificates (they can be sold or transferred to another party, in other words) that represent a specific number of shares (usually, one to ten) of a foreign stock. In many cases,

ADR investors don't have voting privileges because the shares are held by the bank. In some cases, ADR holders may be able to give voting instructions to the bank, who can vote on their behalf. U.S. banks issue these stock certificates; therefore, investors receive dividends in U.S. dollars. The certificates are held in a foreign branch of a U.S. bank (the custodian bank). To exchange their ADRs for the actual shares, investors return the ADRs to the bank that's holding the shares.

In addition to the risks associated with stock ownership in general, ADR owners are subject to *currency risk* — the risk that the value of the security may decline because the value of the currency of the issuing corporation may fall in relation to the U.S. dollar. For information on how the strength of the dollar affects the relative prices of goods in the international market, flip to Chapter 13.

Rights: The right to buy new shares at a discount

Corporations offer special privileges known as *rights* (subscription or preemptive) to their common stockholders. To maintain stockholders' proportionate ownership of the corporation, rights allow existing stockholders to purchase new shares of the corporation at a fixed discounted price directly from the issuer, before the shares are offered to the public. Stockholders receive one right for each share they own. The rights are short-term — usually, 16 to 30 days, but in some cases may go up to 60. The rights are marketable, and stockholders may sell them to other investors. If existing stockholders don't purchase all the shares, the issuer offers any unsold shares to a *standby underwriter* — a broker–dealer that purchases any shares that weren't sold in the rights offering and resells them to other investors.


TIP

For the SIE exam, you can assume that common stockholders automatically receive rights.

Warrants: The right to buy shares of stock at a fixed price

Warrants are certificates that entitle the holder to buy a specific amount of stock at a fixed price and are usually issued along with a new bond, preferred stock, or other securities offering. Warrant holders have no voting rights and receive no dividends. Bundled bonds and warrants or bundled stock and warrants are called *units.* Unlike rights, warrants are long-term and sometimes perpetual (without an expiration date). Warrants are *sweeteners* because they're something that the issuer throws into the new offering to make the deal more appealing, but they can also be sold separately just like any other marketable security. As you can imagine, when warrants are issued, the warrant's *exercise price* (the price at which the investor can utilize the warrant to buy the stock) is set well above the underlying stock's market price.

Suppose that QRS warrants give investors the right to buy QRS common stock at $20 per share when QRS common stock is trading at $12. Certainly, exercising their warrants to purchase QRS stock at $20 wouldn't make sense for investors when they can buy QRS stock in the market at $12. If QRS rises above $20 per share, however, holders of warrants can exercise their warrants and purchase the stock from the issuer at $20 per share.


TIP

On the SIE exam, both rights and warrants may be referred to as *derivative securities* because their value is derived from the value of an underlying security (common stock of the issuer).

Testing Your Knowledge

Now that you've learned what you need to know about equity securities (at least as far as the SIE exam goes), it's time to attack some questions. Read carefully so that you don't make any careless mistakes.

Practice questions

1. Common stockholders have the right to vote for which of the following?

   I. Stock splits
   II. Cash dividends
   III. Board of directors
   (A) I and II
   (B) I and III
   (C) II and III
   (D) I, II, and III

2. DIMM Corporation has just declared bankruptcy. Remaining assets would be distributed in which way (from first to last)?

   (A) IRS, unpaid workers, general creditors, preferred stockholders, secured creditors, subordinated debenture holders, and common stockholders
   (B) Common stockholders, general creditors, preferred stockholders, subordinated debenture holders, secured creditors, IRS, and unpaid workers
   (C) Unpaid workers, IRS, secured creditors, general creditors, subordinated debenture holders, preferred stockholders, and common stockholders
   (D) IRS, unpaid workers, secured creditors, subordinated debenture holders, general creditors, preferred stockholders, and common stockholders

3. Ayla K. owns 2,000 shares of JKL common stock. JKL has four vacancies on the board of directors. If the voting is cumulative, Ayla may vote in any of the following ways except

   (A) 2,000 votes for each of the four candidate positions
   (B) 4,000 votes each for two candidate positions
   (C) 5,000 votes for one candidate position and 3,000 votes for another candidate position
   (D) 3,000 votes for each of three candidate positions

4. The par value of a common stock is

   (A) in direct relation to the market value
   (B) used only for bookkeeping purposes
   (C) always set at $1 unless the stock is issued as no par value
   (D) the basis for which cash dividends are paid

5. Tender offers typically _____ the price of the outstanding shares of a corporation.

(A) increase

(B) decrease

(C) don't affect

(D) increase or decrease

6. Which of the following are true regarding ADRs?

I. They're receipts for foreign securities in U.S. markets.

II. Dividends are paid in the foreign currency.

III. They're negotiable.

(A) I and III

(B) I and II

(C) II and III

(D) I, II, and III

7. Declan Hudson owns 1,200 shares of ABCD Corporation common stock. ABCD announces a 1-for-2 reverse-split. If the price of ABCD closed at $10 the day before the split, what would Declan's position be after the split?

(A) 2,400 shares at $20

(B) 2,400 shares at $5

(C) 600 shares at $5

(D) 600 shares at $20

8. An investor purchased 200 shares of DDD common stock at $41 per share. DDD previously announced a 5 percent stock dividend payable to shareholders of record. On the date before the ex-dividend date, DDD closed at $44 per share. What would the investor's position be on the ex-dividend date?

(A) 200 shares at $39.05 per share

(B) 200 shares at $41.90 per share

(C) 210 shares at $39.05 per share

(D) 210 shares at $41.90 per share

9. WXY Corporation common stock closed at $45 on the business day before the ex-dividend date. If WXY previously announced a 77-cent dividend, at what price will the stock open the next trading day?

(A) 44.22

(B) 44.23

(C) 45.00

(D) 45.77

10. A corporation has issued 6 percent $100 par cumulative preferred stock. It paid $4 in dividends the first year and $3 in dividends the second year. If the corporation wants to declare a dividend for common shareholders the following year, how much must it pay per share to its cumulative preferred stockholders?

(A) $5
(B) $6
(C) $11
(D) $14

11. Which of the following preferred stocks would most likely pay the highest dividend if issued by the same corporation?

(A) Callable preferred
(B) Convertible preferred
(C) Prior preferred
(D) Can't be determined

12. Rights are automatically received by

(A) convertible preferred stockholders
(B) senior preferred stockholders
(C) common stockholders
(D) both (A) and (B)

13. Which of the following is/are true of warrants?

(A) They're long-term.
(B) They're considered to be sweeteners.
(C) They're marketable.
(D) All of the above.

14. STU Corporation would like to offer its existing shareholder the privilege to purchase additional shares at a fixed price. Which of the following securities would STU issue?

(A) Convertible preferred stock
(B) Call
(C) Rights
(D) Futures

15. Under statutory voting, an individual stockholder may vote for each vacancy on the board of directors equal to

(A) the number of vacancies on the board of directors
(B) the number of shares owned multiplied by the number of vacancies on the board of directors
(C) the number of shares owned by the stockholders
(D) any of the above

16. When a corporation splits is its stock,

(A) The price of their common stock increases.

(B) The price of their common stock decreases.

(C) Each shareholder's proportionate ownership increases.

(D) Tach shareholder's proportionate ownership decreases.

17. In June, JKL Corporation announced a 20 percent stock dividend for its common shareholders. Ayla K. holds 2,000 shares of JKL common stock at $40 per share. After payment of the dividend, what would Ayla's new price per share be and how many shares would she be holding?

(A) 1,600 shares at $48.00

(B) 2,000 shares at $32.00

(C) 2,400 shares at $32.00

(D) 2,400 shares at $40.00

18. If a corporation were to go bankrupt, which of the following entities would have the highest claim on the assets in a Chapter 11 proceeding?

(A) Preferred shareholders

(B) Common shareholders

(C) Secured debt holders

(D) Unsecured debt holders

Answers and explanations

1. **B.** Of the choices given, common stockholders have the right to vote for stock splits and for members of the board of directors. Common stockholders can't vote for cash or stock dividends.

2. **C.** In the event that a corporation declares bankruptcy, the corporate assets are distributed in the following way: unpaid workers, IRS, secured creditors, general creditors, subordinated debenture holders, preferred stockholders, and finally (if there's anything left) common stockholders.

3. **D.** Because the voting is cumulative, Ayla has the right to vote as she sees fit. Ayla has 2,000 shares and is voting on 4 positions on the board of directors, so she has a total 8,000 votes (2,000 shares $\times$ 4 positions), which she can use in any way. The reason that (D) doesn't work is that it would require Ayla to have 9,000 votes (3,000 votes $\times$ 3 positions).

4. **B.** The issuer uses the par value of a common stock for bookkeeping purposes. Par value has no relationship with the market value; it has no relationship with dividends paid (if any); and even though it's often set at $1, it doesn't have to be.

5. **A.** Tender offers occur when a corporation, person, or group attempts to take control of a particular corporation, attempting to buy enough shares in the market to gain control. To purchase enough shares, the corporation, person, or group offers a premium over the current market price to sellers who are willing to sell a large number of securities. Because the offer is at a premium, tender offers drive up the price of the outstanding securities.

6. **A.** ADRs are receipts for foreign securities traded in the United States. ADRs are negotiable (can be sold or transferred to another party). Investors receive dividends in U.S. dollars, not the foreign currency. Because ADRs are receipts, investors don't receive the actual certificates.

7. **D.** Because ABCD is doing a reverse-split, Declan would have fewer shares after the split, and the price of the stock would increase. This transaction is a 1-for-2 reverse-split, so to determine the shares, you have to multiply them by 1 divided by 2. To get the price, you have to multiply it by 2 divided by 1. Check out the following equation:

$$\text{Shares after the split} = 1,200 \text{ shares} \times \frac{1}{2} = 600 \text{ shares}$$

$$\text{Price after the split} = \$10 \times \frac{2}{1} = \$20$$

8. **D.** You can cross out two answers to this question without doing the math. The investor received a stock dividend, so the number of shares had to increase. Therefore, (A) and (B) are out. Next, ignore the purchase price; you have to look at the overall value of the investment on the day before the ex-dividend date (the first day the stock trades without a dividend). In this case, the investor had 200 shares at $44 per share. Check out the math:

$$200 \text{ shares} \times \$44 = \$8,800$$

You can see that the investor had an overall value of investment on the day before the ex-dividend date of $8,800. That doesn't change due to the dividend. So, on the

ex-dividend date, the investor still had $8,800 worth of stock. Now, however, the investor has 210 shares (200 shares + 10 shares [5% of 200]). By dividing the $8,800 shares by 210 shares, you'll get a price of $41.90 per share:

$$\frac{\$8,800}{210 \text{ shares}} = \$41.90 \text{ per share}$$

9. **B.** On the ex-dividend date, the stock would be reduced by the amount of the dividend. This question is fairly easy, but check out the math:

$$\text{Stock price} - \text{dividend} = \text{price on the ex - dividend date}$$
$$\$45 - \$0.77 = \$44.23$$

10. **C.** Because the stock is cumulative preferred stock, the corporation must make up any missed dividends to its cumulative preferred stockholders before paying a dividend to its common stockholders. In the first year, the corporation shorted its preferred stockholders $2 per share; it was supposed to pay $6 ($100 par × 6%) but paid only $4. In the second year, the corporation paid shareholders only $3, so they were shorted $3. So far, so good. But the key to this question is that the corporation wants to pay a common dividend the following year, so you have to add the $6 in dividends for that year also. Here's how it looks:

$$(\$6 - \$4) + (\$6 - \$3) + \$6 = \$11$$

11. **A.** Of the choices listed, callable preferred would most likely pay the highest dividend. Remember that more risk equals more reward. In other words, people who purchase callable preferred can't necessarily hold the stock as long as they want because after a predetermined date, the stock can be called by the issuer. Because the shares can be called, the issuer has to pay a higher dividend to entice investors to buy. Investors can convert convertible preferred stock to common stock of the issuing corporation at any time, so because that option is safer and gives investors more flexibility, the issuer would pay a lower dividend. Prior or senior preferred adds another layer of safety for investors; if the corporation were to go bankrupt, holders would get paid before other preferred stockholders. Accordingly, they receive a lower dividend.

12. **C.** Rights allow shareholders to purchase new shares issued by a corporation at a discount. Rights are short-term (typically, 30–45 days) and are available only to common stockholders.

13. **D.** Warrants allow shareholders to purchase shares of a corporation at a fixed price and are typically bundled with a stock or bond offering to sweeten the deal. Warrants are long-term and sometimes perpetual (never-ending). Because they can be traded separately, they're marketable securities.

14. **C.** If a corporation would like to offer its existing shareholders the right to purchase additional shares at a fixed price, they would have a rights offering. When there is a rights offering, existing shareholders have the right — but not the obligation — to purchase the new shares at a fixed price, which is at a discount from the market price at the time of the offering. Rights offerings typically only last from a couple of weeks up to 30 days. Any shares not purchased during the rights offering would be placed with a standby underwriter to sell.

15. **C.** Under statutory (regular) voting rules, individual stockholders may vote up to the amount of shares they own for each open position on the board of directors.

16. **B.** When a corporation splits its stock (2-for-1, 3-for-1, 3-for-2, and so on), the price of the stock decreases, and the amount of shares each shareholder has increases. This means that after the split, each shareholder will own more shares at a lower price and still keeping their proportionate ownership the same.

17. **C.** In this case, you didn't even have to do the math. They're giving Ayla a 20 percent stock dividend, so she will have more shares. This eliminates answers A and B. If they're increasing the amount of shares, the price has to decrease. The only answer that works is C. To double-check your work, Ayla had $80,000 worth of stock before the split (2,000 shares × $40), so after the split, she should still have $80,000 worth of stock (2,400 shares × $32).

18. **C.** In a Chapter 11 proceeding, debt holders have a higher claim on the corporation's assets than shareholders. And, secured debt holders (debt secured with collateral), would have a higher claim on the assets than unsecured debt holders.

IN THIS CHAPTER

- Understanding the specifics of bonds
- Examining securities issued by the U.S. government
- Looking at short-term bonds
- Practicing with some sample questions

Chapter 7
Debt Securities: Corporate and U.S. Government Loans

Instead of giving up a portion of their company (via stock sales), corporations can borrow money from investors by selling bonds. Local governments (through municipal bonds; see Chapter 8) and the U.S. government also issue bonds. For SIE exam purposes, most bonds from the same issuer are considered to be safer than stocks.

Bondholders aren't owners of a company, as stockholders are; they're creditors. Bondholders who purchased bonds in the primary market are lenders of money to an institution for a fixed period and receive interest for doing so. This arrangement allows the institution to borrow money on its terms (with its chosen maturity date, scheduled interest payments, interest rate, and so on), which it can't do when borrowing from a lending institution.

The SIE exam tests you on your ability to understand the types of bonds issued, the terminology used, and (yes) some math. This chapter has you covered on topics relating to corporate and U.S. government debt securities. At the end of this chapter, I've added a quick chapter quiz to help you get a feel for questions you might see on the real SIE exam.

Tackling Bond Terms, Types, and Traits

Before you delve deeper into bonds, make sure that you have a good handle on the basics. Understanding bond basics is a building block that can make all the rest of the bond stuff easier. In this section, I first review basic bond terminology and then move on to some bond characteristics.

Covering bond terminology

The SIE exam designers expect you to know general bond terminology. (And I give it to you here; that's why I get paid the big bucks!) If you've already studied another textbook or taken a course, this section serves as a review. This stuff is basic, but the SIE exam does test it:

- **Maturity date:** All issued bonds have a stated maturity (20 years, 30 years, and so on). The *maturity date* is the date bondholders get paid back for the loans they made. At maturity, bondholders receive par value (see the next item) plus any interest due. Because not as many investors are looking to tie up their money for a long period, short-term bonds are typically more liquid (actively traded) than long-term bonds.
- **Par value:** *Par value* is the face value or denomination of the bond. Although par value isn't significant to common stockholders (whose issuers use it solely for bookkeeping purposes), it's important to bondholders. For SIE exam purposes, you can assume that the par value for each bond is $1,000 unless otherwise stated in the question.

  REMEMBER

  Bond prices are quoted as a percentage of par value, most often without the percent sign. A bond trading at 100 is trading at 100 percent of $1,000 par. Regardless of whether investors purchase a bond for $850 (85), $1,000 (100), or $1,050 (105), they'll receive par value plus any interest due at the maturity date of the bond, usually with semiannual interest payments along the way. Corporate bonds are usually quoted in increments of ⅛ percent (⅛% = 0.00125 or $1.25), so a corporate bond quoted at 99⅜ (99.375 percent) would be trading at $993.75.

  If you see something like "the last transaction in ABC 7.50s 2035 was at 101", this means that ABC bonds with a coupon rate of 7.50 and an expiration of 2035 last traded at $1,010 (101% of 1,000 par). This means that the bonds traded at a premium (over par value).
- **Coupon rate:** Investors aren't lending money to issuers for nothing, of course; they receive interest for providing loans to the issuer. The *coupon rate* on the bond tells the investors how much annual interest they'll receive. Although bonds are no longer issued with physical coupons, some bonds previously required investors to detach dated coupons (bearer bonds and partially registered bonds) from their bonds and turn them in to receive their interest payments.

  The coupon rate is expressed as a percentage of par value. A bond with a coupon rate of 6 percent, for example, would pay annual interest of $60 (6% × $1,000 par value). You can assume that bonds pay interest semiannually (twice a year) unless otherwise stated. So, in this example, an investor would receive $30 every six months for each bond owned.

  REMEMBER

  Bondholders receive *interest* (payment for the use of the money loaned), and stockholders receive *dividends.* (See Chapter 6.)
- **The bond indenture:** The *indenture* (also known as *deed of trust or resolution*) is the legal agreement between the issuer and its bondholders and is printed on or attached to the bond certificate. All indentures contain basic terms:
  - The maturity date
  - The par value
  - The coupon rate (interest rate) and interest payment dates
  - Any collateral securing the bond (See "Comparing secured and unsecured bonds" later in this chapter.)
  - Any callable or convertible features (Check out "Contrasting callable and put bonds" and "Popping the top on convertible bonds" later in this chapter.)

The bond indenture also includes the name of a trustee. A *trustee* is an organization that administers a bond issue for an institution; it ensures that the bond issuer meets all the terms and conditions associated with the borrowing. Essentially, the trustee tries to make sure that the issuer does the right thing.

The following question tests your knowledge of bond interest.

EXAMPLE

Melissa R. purchased 100 AA-rated bonds issued by COW Corp. Melissa purchased the bonds at 105 percent of par value, and they're currently trading in the market at 104. If the coupon rate is 7½ percent, how much annual interest does Melissa receive?

(A) $37.50

(B) $75.00

(C) $3,750.00

(D) $7,500.00

The correct answer is (D). This question is a nice, easy one after you wade through the information you don't need. You need only the number of bonds and the coupon rate to figure out the answer. Don't let yourself get distracted by the AA rating, the purchase price, or the market price; that information is there to confuse you.

Melissa purchased 100 bonds at $1,000 par (remember that you can assume $1,000 par) with a coupon rate of 7½ percent, so do the math:

$$100 \text{ bonds} \times \$1{,}000 \text{ par} \times 7\,1/2 = \$7{,}500.00$$

Option (C) would have been correct if the question had asked for the semiannual interest.

Following bond issue and maturity schedules

Bond certificates can not only be in different forms, but also be scheduled with different types of maturities. Maturity schedules depend on the issuer's needs. The following list presents an explanation of the types of bond issues and maturity schedules:

- **Term bonds:** Term bonds are all issued at the same time and have the same maturity date. Short term corporate bonds have initial maturities of 3 years or less; medium term, 4-10 years; long term more than 10 years. If a company issues $20 million worth of term bonds, for example, they all mature in 30 years. Because of the large payment that's due at maturity, most corporations that issue this type of bond have what is called a *sinking fund*. (More on that in the next paragraph.) Most corporations issue term bonds because they're able to lock in a set coupon rate for a set period of time.

  A corporation creates a sinking fund when it sets aside money over time in order to retire its debt. Investors like to see that a sinking fund is in place because it lowers the likelihood of *default* (the risk that the issuer can't pay interest or par value back at maturity). The likelihood of default is determined by credit rating services such as Moody's and Standard & Poor's; for more on that topic, see "Considering bond credit ratings" later in this chapter.

- **Series bonds:** These bonds are issued in successive years but have only one maturity date. Issuers of series bonds pay interest only on the bonds that they've issued so far. Construction companies that are building developments in several phases are most likely to issue this type of bond. Fewer series bonds are issued than term and serial bonds.

- **Serial bonds:** In this type of bond issue, a portion of the outstanding bonds matures at regular intervals. (Perhaps 10 percent of the entire issue matures yearly.) Serial bonds are usually issued by corporations and municipalities to fund projects that provide regular income streams. Most municipal (local government) bonds are issued with serial maturities.

  A serial bond that has more bonds maturing on the final maturity date is called a *balloon issue.*


TIP

The SIE exam focuses mainly on term and serial bonds. A typical SIE exam question may ask "Which of the following types of bonds is most likely to have a sinking fund?" The answer is term bonds; they're the ones in which the entire bond issue has one maturity date and, therefore, require the issuer to pay a lot of money at one time.

Comparing secured and unsecured bonds

The assets of the issuer may or may not back bonds. For test purposes, assume that bonds backed by *collateral* (assets that the issuer owns) are considered to be safer for the investor. Such *secured bonds* (bonds backed by collateral) involve a pledge from the issuer that a specific asset, such as property, would be sold to pay off the outstanding debt in the event of default. *Unsecured bonds*, as the name implies, involves no such pledge. Obviously, with all else being equal, secured bonds normally have a lower yield than unsecured bonds.

The SIE exam tests your knowledge of several types of secured bonds:

- **Mortgage bonds:** These bonds are backed by property that the issuer owns. In the event of default or bankruptcy, the issuer must liquidate the property to pay off the outstanding bonds. Mortgage bonds may be open- or closed-end. With an *open-end* mortgage bond, the issuer may borrow more money by using the same property as collateral. With a *closed-end* mortgage bond, the issuer can't borrow more money by using the same property as collateral.
- **Equipment trusts:** These bonds are issued mainly by transportation companies and are backed by equipment they own (airplanes, oil rigs, trucks, and so on). If the company defaults on its bonds, a trustee would sell the assets backing the bonds to satisfy the debt.
- **Collateral trusts:** These bonds are backed by financial assets (stocks and bonds) that the issuer owns. A *trustee* (a financial institution the issuer hires) holds the assets and would sell them to pay off the bonds in the event of default.
- **Guaranteed bonds:** Guaranteed bonds are backed by a firm other than the original issuer, often a parent company. If the issuer defaults, the guarantor pays off the bonds. As such, the rating of the bonds is tied to the rating of the guarantor.

As I imply previously, unsecured bonds are the opposite of secured bonds: They aren't backed by any assets whatsoever — only by the good faith and credit of the issuer. If a reputable company that has been around for a long time issues the bonds, the bonds aren't considered to be too risky. If they're issued by a relatively new company or one with a bad credit rating, hold onto your seat! Again, for SIE exam purposes, assume that unsecured bonds are riskier than secured bonds. Here's the lineup of unsecured bonds:

- **Debentures:** These bonds are backed only by the issuer's good word and written agreement (the indenture) stating that the issuer will pay the investor interest when due (usually, semiannually) and reach par value at maturity.
- **Income (adjustment) bonds:** These bonds are the riskiest of all. The issuer promises to pay par value back at maturity and will make interest payments only if earnings are high enough. Companies in the process of reorganization usually issue these bonds at a deep discount. (The bonds might sell for $500 and mature at par, or $1,000, for example.) For test and real-world purposes, you shouldn't recommend these bonds to investors who can't afford to take a lot of risk.


REMEMBER

Because secured bonds are considered to be safer than unsecured bonds, secured bonds normally have lower coupon rates. You can assume that for the SIE, the more risk an investor takes, the more reward they will receive. Remember the saying "More risk equals more reward." More reward may be in the form of a higher coupon rate or a lower purchase price. Either or both may lead to a higher yield for the investor.

Check out the following question for an example of how the SIE may test your knowledge of the types of bonds.


EXAMPLE

Jon Bearishnikoff is a 62-year-old investor who has 50 percent of their portfolio invested in common stock of up-and-coming companies. The other 50 percent of their portfolio is invested in a variety of stocks of more-secure companies. Jon would like to start investing in bonds. If Jon's main concern is the safety of the investment, which of the following bonds would you least likely recommend?

(A) Collateral trust bonds

(B) Mortgage bonds

(C) Equipment trust bonds

(D) Income bonds

The answer you're looking for is (D). This problem includes a lot of garbage information that you don't need to answer the question. One of your jobs (should you decide to accept it) is to dance your way through the question and cherry-pick the information that you do need. The last sentence is usually the most important one for answering a question. Jon is looking for safety; therefore, you'd be least likely to recommend income bonds because they're usually issued by companies in the process of reorganizing. As a side note, if you become Jon's broker, ensure they don't have 100 percent of their investments in stock. At age 62, Jon should have a decent amount of their portfolio invested in fixed-income securities such as bonds.


REMEMBER

When you're comparing short-term and long-term debt securities, short-term bonds from the same issuer are considered to be safer because the investor isn't tying up their money for as long a period. Because of the extra risk long-term bondholders are taking for tying up their money for a longer period, long-term bondholders generally (except in rare cases) receive a higher coupon (interest rate) for taking that additional risk.

Making Basic Bond Price and Yield Calculations

Although there's not a lot of math on the SIE exam, it does test your knowledge of bond prices and bond yields and how to calculate them. In this section, I review the relationship between bond prices and bond yields. Outstanding bond prices typically don't remain static. As you can imagine, they, too, are affected by things like supply and demand, corporate rating change (see "Determining the Best Investment: Comparing Corporate Bonds" later in this chapter), interest rate changes, whether the bond was purchased at a discount (below par value) or a premium (above par value), and so on.


REMEMBER

The relationship between outstanding bond prices and yields is an *inverse* (opposite) one. You can assume for SIE exam purposes that if interest rates decrease, outstanding bond prices increase, and vice versa. Suppose that a company issues bonds with a 4 percent coupon rate for $1,000. After the bonds are on the market, interest rates decrease. Now the company can issue bonds with

a 3.5 percent coupon rate. Investors with the 4 percent bonds are in a very good position and can demand a premium for their bonds should they decide to sell them in the market.

Rates down $\Downarrow$ = Prices up $\Uparrow$
Rates up $\Uparrow$ = Prices down $\Downarrow$

As a side note, when an investor sells their bonds between coupon dates, they're entitled to accrued interest. Suppose that this investor owned a bond paying $20 interest every 6 months. If they sold that bond halfway between coupon dates, they'd be entitled to receive $10 from the purchaser on top of the selling price. Calculations for accrued interest (broken down on a daily basis) aren't part of the SIE exam but are covered in detail in some of the top-off exams, such as the Series 7.

The following sections review the types of bond yields and how the SIE exam tests this topic.

Nominal yield (coupon rate)

The *nominal yield* (NY) is the easiest yield to understand because it's the coupon rate on the face of the bonds. For exam purposes, you can assume that the coupon rate will remain fixed for the life of a bond. If you have a 5 percent bond, the bond will pay $50 per year interest (5% × $1,000 par value) for the life of the bond. When a problem states that a security is a 5 percent (or 6 percent or whatever) bond, it's giving the nominal yield.

Current yield

The *current yield* (CY) is the annual rate of return on a security. The CY of a bond changes when the market price changes. You can determine the CY by dividing the annual interest by the market price:

$$\text{Current yield (CY)} = \frac{\text{annual interest}}{\text{market price}}$$

The following question involves bond yields.


EXAMPLE

Monique Moneybags purchased one XYZ convertible mortgage bond at 105. Two years later, the bond is trading at 98. If the coupon rate of the bond is 6 percent, what is the current yield of the bond?

(A) 5.7%

(B) 6.0%

(C) 6.1%

(D) Cannot be determined

The correct answer is (C). Yes, I'm giving you a question with a lot of unnecessary information. All I can tell you is that unfortunately, you'll have to get used to it. The securities exam creators are notorious for inserting useless (and sometimes misleading) information into the questions to daze and confuse you. In this case, you need only the annual interest and the market price to calculate the answer. Use the following formula to get your answer:

$$\text{CY} = \frac{\text{annual interest}}{\text{market price}} = \frac{\$60}{\$980} = 6.1\%$$

The annual interest is $60 (6% coupon rate × $1,000 par value), and the current market price is $980 (98% of $1,000 par). The facts that the bond is convertible (bondholders can trade it for common stock; see "Popping the top on convertible bonds" later in this chapter) or a mortgage bond (backed by the issuer's property) and that it was purchased at 105 ($1,050) are irrelevant.

REMEMBER

"Cannot be determined," as tempting as it may be, is almost never the correct answer on the SIE exam.

Yield to maturity (basis)

The *yield to maturity* (YTM) is the yield an investor can expect if holding the bond until maturity. The YTM takes into account not only the market price, but also the par value, the coupon rate, and the amount of time until maturity. When someone yells to you, "Hey, what's that bond yielding?" (all right, maybe I run in a different circle of friends), they're asking for the YTM. The formula for YTM is as follows:

$$\text{YTM} = \frac{\text{annual interest} + \text{annual accretion or} - \text{annual amortization}}{(\text{market price} + \text{par value}) / 2}$$

$$\text{annual accretion} = \frac{\text{par value} - \text{market price}}{\text{years until maturity}}$$

$$\text{annual amortization} = \frac{\text{market price} - \text{par value}}{\text{years until maturity}}$$

I wouldn't worry about committing the preceding equations to memory. The amount of math you'll need on the SIE exam is pretty small. But it's important that you understand the concepts of measurement and the meanings of terms such as YTM, yield to call, total return, and yield to worst.

TIP

Accretion and amortization (the adjustment of the bond price toward par over the amount of time until the bond matures), as in the earlier equation, aren't tested on the SIE exam, but you need to be able to calculate them on some of the corequisite exams. (Accretion is used when a bond is purchased at a price below par value and amortization is used when a bond is purchased at a price above par value.) The preceding equation should help you visualize how YTM works.

Yield to call

The *yield to call* (YTC) is the amount that the investor receives if the bond is called by the issuer prior to maturity, which requires the bondholders to surrender their bonds for par value and sometimes above. The calculations are similar to those for the YTM (see the preceding section), but you substitute the call price for the par value. Your chances of needing to know this on the SIE exam are even more remote than those of needing the YTM calculations.

Yield to worst

To determine the *yield to worst* (YTW), you have to calculate the yield to maturity and YTC for all the call dates (if there's more than one) and choose the lowest. If you get a question on YTW, knowing the definition should be enough to get you by.

Total return

The *total return* calculates the full return on a particular investment over a given period of time. As with the other yields noted, you'll likely not need to calculate it, but you'll need to understand it. The total return provides you a percentage of gain or loss of an investment. To determine the total return, you need to follow these steps:

1. **Determine the initial cost of the investment.**
2. **Calculate the total amount of interest or dividends received over the time of investment.**

3. **Add the interest or dividends to the selling price.**
4. **Divide that number by the initial cost of the investment and subtract 1.**

Basis point

A *basis point* is one of the easier calculations. Basis points are typically used in the bond market, mutual funds, and exchange-traded funds (ETFs). Basis points are simply $\frac{1}{100}$th of a percent. If the yield on a Treasury bond (T-bond) lowers 1.2 percent to 1.1 percent, it is said to have moved ten basis points. Also, when comparing expenses on a fund (see Chapter 9), people often refer to the fund expenses by basis points. If you're comparing two funds, one fund's expenses might be 0.15 percent and the other's 0.13 percent for a difference of 0.02 percent or two basis points.

Accrued interest

When investors purchase outstanding bonds in the market, they may have to pay an additional cost besides the market price (and, of course, your commission). The additional cost is called accrued interest. *Accrued interest,* which is due when bonds are purchased between coupon dates, is the portion of the interest still due to the seller. As you may remember, most bonds pay interest once every six months. If an investor holds onto a bond for 87 days out of a 180-day six-month period (for corporate and municipal bonds), they are entitled to 87/180 of that next interest payment; that's accrued interest.


REMEMBER

Although you won't be required to calculate accrued interest when taking the SIE (not so with the Series 7), you should understand the concept and that for *corporate* and *municipal bonds*, accrued interest is calculated using *30-day months and 360 day years*. When calculating accrued interest on *U.S. government bonds and notes*, you have to use *actual days in a month and a 365-day year*.

Accrued interest is calculated from the trade date, up to, but not including the settlement date.

Determining the Best Investment: Comparing Corporate Bonds

As you grind your way through SIE exam questions, you may be asked to determine the best investment for a particular investor. You need to look at the question carefully for clues to help you choose the correct answer. (Is the investor looking for safety, for example, or is the investor close to retirement?) Consider several factors, including credit rating, callable and put features, and convertible features. Certainly, the investor's investment objectives (if stated) have to take center stage.

Considering bond credit ratings

The institutions that rate bonds are most interested in the likelihood of *default* (the likelihood that the interest and principal won't be paid when due). For the exam, you can assume that the higher the credit rating, the safer the bond and, therefore, the lower the yield.

The two main bond credit rating companies are Moody's and Standard & Poor's (S&P). S&P ratings of BB and lower and Moody's ratings of Ba and lower are considered to be *junk bonds* or *high-yield bonds,* which have a higher likelihood of default, as Table 7-1 explains. (Another credit rating

service, called Fitch, uses the same rating symbols as S&P.) ***Note:*** Different sources may show some slight variations in how S&P and Moody's ratings compare, but the relationships shown here are the most common.

TABLE 7-1 **Bond Credit Ratings (by Quality)**

Quality	S&P	Moody's
Highest	AAA	Aaa
High	AA	Aa
Upper medium	A	A
Lower medium	BBB	Baa
Speculative (junk)	BB	Ba
Speculative (junk): Interest or principal payments missed	B	B
Speculative (junk): No interest being paid	C	Caa
In default	D	D

As if these categories weren't enough, S&P can break down each category even further by adding a plus (+) or minus (–) sign after the letter category. The plus sign represents the high end of the category, and the minus sign designates the lower end of the category. If you see no plus or minus sign, the bond is in the middle of the category. Moody's can break down a category further by adding a 1, 2, or 3. The number 1 is the highest ranking, 2 represents the middle, and 3 is the lowest. The top four ratings are considered to be *investment grade* (AAA, AA, A, and BBB for S&P; Aaa, Aa, A, and Baa for Moody's), and the letter ratings below that are considered to be *junk bonds* or *high-yield bonds.*


TIP

S&P uses all capital letters (AAA, AA, and so on). Additionally, S&P has an ampersand (&) between the "S" and the "P" in its name. Think of the ampersand as being like a plus sign to help you remember that S&P uses pluses and minuses within its categories.

Here's a typical bond-ratings question.


EXAMPLE

Place the following S&P bond ratings in order from highest to lowest:

I. A+

II. AA

III. A–

IV. BBB+

(A) I, II, III, IV

(B) I, III, II, IV

(C) IV, I, II, III

(D) II, I, III, IV

The correct answer is (D). When you're answering this type of question, always look at the letters first. The only time pluses or minuses come into play is when two answers have the same letters, as in statements I and III. The highest choice is AA, followed by A+ because it's higher than A–, which is even higher than BBB+.

Contrasting callable and putable (put) bonds

Your mission for the SIE exam is to know which bonds are better for investors and when bonds are likely to be called or put. As you may know, bonds can be issued in callable and put forms:

- **Callable bonds:** A *callable bond* is a bond that the issuer has the right to buy back (call from investor) at the price stated on the indenture (deed of trust). All callable bonds must have a *call provision* that stipulates the call date (the first date the bonds can be called), and the *call price* (the price investors will receive if the bonds are called). Callable bonds are riskier for investors because investors can't control how long they can hold onto the bonds. To compensate for this risk, they usually receive a higher coupon rate (more risk = more reward).

  Most callable bonds are issued with call protection. *Call protection* is the amount of time (usually, several years) that an issuer has to wait before calling its bonds (such as five years after issuance). Some callable bonds also have a *call premium,* which is an amount over par value that an issuer has to pay if it calls its bonds in the year(s) immediately following the expiration of the call protection.

  If a *make whole call provision* is included, it allows the issuer to call the bonds provided that the issuer makes a lump-sum payment to investors that includes not only payment for the bond but also the present value of any future interest payments investors will miss because of the call.

  Another type of bond that can be callable is a step coupon bond. Also known as *stepped coupon bonds* or *step-up coupon securities, step coupon bonds* typically start at a low coupon rate, but the coupon rate increases at predetermined intervals, such as every five years. The issuer typically has the right to call the bonds at par value at the time the coupon rate is due to increase.

- **Put bonds:** *Put bonds* are better for investors. Put bonds allow the investor to "put" the bonds back (redeem them) to the issuer at any time at the price stated on the indenture. Because the investors have the control, put bonds are (of course) rarely issued. Because these bonds provide more flexibility to investors (who have an interest in the bond and stock prices), put bonds usually have a lower coupon rate.


REMEMBER

There's a direct correlation between interest rates and when bonds are called or put. Issuers call bonds when interest rates decrease; investors put bonds when interest rates increase. Check out the following question to see how this process works.


EXAMPLE

Issuers would more likely call their bonds when interest rates are

(A) increasing

(B) decreasing

(C) staying the same

(D) fluctuating

The correct answer is (B). Being adaptable when taking the SIE exam can certainly help your cause. In this question, you have to look from the issuer's point of view, not the investor's. An issuer would call bonds when interest rates decrease because it could redeem the bonds with the higher coupon payments and issue bonds with lower coupon payments to save money. Conversely, investors would put their bonds back to the issuer when interest rates increase so they could invest their money at a higher interest rate.


REMEMBER

You can assume for SIE exam purposes that if interest rates increase, bond yields increase.

Popping the top on convertible bonds

Bonds that are convertible to common stock are called *convertible bonds.* Convertible bonds are attractive to investors because investors have an interest in the bond price as well as the price of the underlying stock. *Parity* occurs when a convertible bond and its underlying stock (the stock it's convertible into) are trading equally (that is, when a bond trading for $1,100 is convertible into $1,100 worth of stock).


TIP

If a convertible bond is trading below parity (below the value of the underlying shares it covers), it would make financial sense for an investor to convert. It costs the investor nothing to convert their bonds to the underlying stock.

In the event that you have to answer a question about convertible bonds to determine whether they're worth converting to the underlying stock, you can use the following formula:

$$\text{conversion ratio} = \frac{\text{par value}}{\text{conversion price}}$$


REMEMBER

You see this same equation in Chapter 6 relating to convertible preferred stock.

You can use the conversion ratio to calculate the parity price:

$$\text{parity price of the bond} = \text{market price of the stock} \times \text{conversion ratio}$$

or

$$\text{parity price of the stock} = \frac{\text{market price of the bond}}{\text{conversion ratio}}$$


EXAMPLE

ABCD convertible bonds are convertible into 25 shares of common stock. If the stock trades at 36, what is the parity price of the bond?

(A) $36

(B) $40

(C) $80

(D) $900

The correct answer is (D). When you get a parity-price question, you have to determine where the stock and the bond (or convertible preferred stock) are trading equally. In this case, you were already given the conversion ratio, which is the amount of shares the bond is convertible into (25). So using that information, you can plug the information given into the following equation:

$$\text{parity price of the bond} = \text{market price of the stock} \times \text{conversion ratio}$$

$$\text{parity price of the bond} = \$36 \times 25 \text{ shares} = \$900$$

Exploring U.S. Government Securities

On the SIE and companion exams, you need to know the basic types of U.S. government securities, their initial maturities, and certain characteristics.

As you may already know, the U.S. government also issues bonds. U.S. government bonds are considered to be the safest of all securities. (Yes, you did read that correctly: the *safest of all securities.* I feel that this statement is worth repeating.) How can U.S. government securities be so safe when the government is running such a large deficit? Guess what — I don't know, and you don't need to know either. I can only assume that the U.S. government can always print more

currency to make payments on its securities if needed. But even U.S. government securities are subject to certain risks, such as interest risk, reinvestment risk, purchasing power risk, and so on. (See Chapter 13.)

These days, all U.S. government securities are issued and held in electronic (book-entry) form. Because Treasury bonds have maturities of up to 30 years, however, some are still out there in paper form.

TIP

With government bonds, you use some of the same types of calculations you use for corporate bonds.

Understanding the types of U.S. government securities

Table 7-2 gives you an overview of types of U.S. government securities and their specifics. Memorize all the information in the following table so that you can ace U.S. government securities questions on the SIE exam. Individual investors can purchase U.S. government securities directly through `www.treasurydirect.gov`, through a bank, or through a broker. The securities are issued in electronic form, so investors don't receive the actual bond certificate.

TABLE 7-2 U.S. Government Securities and Time until Maturity

Security	Initial Maturity	Characteristics
Treasury bills (T-bills)	4, 8, 13, 17, 26, or 52 weeks; considered to be short-term U.S. debt securities	Issued at a discount and mature at par. The difference between the purchase price and par is considered to be interest, even though no interest payments were made. Minimum purchase is $100.
Treasury notes (T-notes)	2, 3, 5, 7, or 10 years; considered to be intermediate-term U.S. debt securities	Pay interest every 6 months. Minimum purchase is $100.
Treasury bonds (T-bonds)	20 or 30 years; considered to be long-term U.S. debt securities	Pay interest every 6 months. Minimum purchase is $100.
T-STRIPS (Separate Trading of Registered Interest and Principal of Securities)	6 months to 30 years	Considered to be zero-coupon securities (issued at a discount and mature at par) and don't receive interest payments. Purchase price varies. The minimum face value must be $100.
TIPS* (Treasury Inflation-Protected Securities)	5, 10, or 30 years	Pay interest every 6 months. Par value and interest payments adjust according to inflation or deflation. Minimum purchase is $100.

**TIPS are tied to the Consumer Price Index (CPI), which measures inflation. The par value changes according to inflation. If inflation is high (prices of goods and services are increasing), the par value increases. If we're in a period of deflation (prices on goods and services are decreasing), the par value decreases. Because investors are getting a percentage of par value as their interest payments, the interest payments vary along with the par value.*

REMEMBER

For the SIE exam, keep in mind that the interest received on U.S. government securities is exempt from state and local taxes. The interest received on municipal bonds is exempt from federal taxes (although I get into that topic a little more in Chapter 8). Chapter 15 gives you the scoop on taxes.

Looking at agency securities

Agency bonds are ones issued by a U.S. government-sponsored agency or government-sponsored entity (GSE). The bonds are backed by the U.S. government, but not all are guaranteed by the full faith and credit of the U.S. government except for Government National Mortgage Association (GNMA) bonds, which are directly backed. As such, agency bonds (although almost as safe) are considered to be riskier than U.S. government bonds and notes such as T-bonds, T-notes, and T-bills. Not all U.S. government agency securities are exempt from SEC registration. GSEs include the following:

- **GNMA** (Government National Mortgage Association, or Ginnie Mae): GNMAs are the only agency securities backed by the full faith and credit of the U.S. government. GNMAs support the U.S. Department of Housing and Urban Development (HUD). GNMAs are considered *asset-backed securities* (backed by mortgages), which typically are sold based on their *average life expectancy*, rather than their stated life expectancy (typically 30 years). Even though many people have a 30-year mortgage, the average life might be only 17 years or so based on refinancing and people selling their homes.
- **FNMA** (Federal National Mortgage Association, or Fannie Mae): FNMA is a publicly held corporation that is responsible for providing capital for certain mortgages. As such, FNMA may purchase conventional mortgages, Department of Veterans Affairs mortgages, U.S. Federal Housing Association mortgages, and so on. FNMA is privately owned and publicly held but is still a GSE.
- **FHLMC** (Federal Home Loan Mortgage Corporation, or Freddie Mac): As a public corporation, Freddie Mac was designed to create a secondary market for mortgages. Freddie Mac purchases residential mortgages from financial institutions and packages them into mortgage-backed securities that are sold to investors.
- **FCS** (Farm Credit System): The FCS consists of lending institutions that provide financing and credit to farmers. It's a GSE but is privately owned. The FCS sells securities to investors and in turn loans the funds raised to farmers. The FCS is overseen by the Farm Credit Administration.
- **SLMA** (Student Loan Marketing Association or Sallie Mae): SLMA isn't involved in providing mortgages but provides a secondary market for student loans. As such, SLMA purchases student loans and repackages them as short- and medium-term debt securities for sale to investors.


TIP

Certain mortgage-backed securities are susceptible to reinvestment risk because many homeowners refinance when interest rates fall (*prepayment risk*). In that case, holders of mortgage-backed securities get paid back sooner than expected and are reinvesting at a lower interest rate. In addition, if interest rates stay the same or increase, homeowners won't refinance as often, and holders of mortgage-backed securities may end up having to hold their investment for a longer period than expected (*extension risk*).

Playing It Safe: Short-Term Loans or Money Market Instruments

Your SIE exam will likely include a question or two on money market instruments. *Money market instruments* are relatively safe short-term loans that can be issued by corporations, banks, the U.S. government, and municipalities. Most of these instruments have maturities of one year or less;

they're usually issued at a discount and mature at par value. The following list reviews some basic characteristics of money market instruments to help you earn an easy point or two on the SIE exam:

- **Repurchase agreements:** Repurchase agreements (*repos*) are a contract between a buyer and a seller. The seller of the securities (usually, T-bills) agrees to buy them back at a previously determined price and time. Repos are short-term loans.
- **Federal funds:** Federal funds are loans between banks to help meet reserve requirements. Federal funds are usually overnight loans for which the rates change constantly depending on supply and demand.

  Reserve requirements are the percentage of deposits that member banks must hold each night as a regulatory protection device. Banks that aren't able to meet their reserve requirements may borrow from other banks at the fed funds rate. For more info on the fed funds rate and other tools that the Federal Reserve Board uses to influence money supply, see Chapter 13.

REMEMBER

- **Corporate commercial paper:** Commercial paper is unsecured short-term corporate debt. Commercial paper is issued at a discount and matures at par value. Commercial paper is issued with an initial maturity of 270 days or less and is exempt from SEC registration.
- **Brokered (negotiable) certificates of deposit (CDs):** Brokered CDs are low-risk investments that originate from a bank and are outsourced to broker–dealers to sell to investors. Unlike typical CDs, which are purchased directly from a bank, brokered CDs can be traded in the market. Negotiable CDs that require a minimum investment of $100,000 are often called *jumbo CDs*.
- **Eurodollars:** *Eurodollars* are American dollars held by a foreign bank outside the United States. This situation is usually the result of payments made to overseas companies. Eurodollars are not to be confused with Eurodollar bonds (dollar-denominated bonds issued and held overseas).
- **Banker's acceptances (BAs):** A BA is a time-draft (short-term credit investment) created by a company whose payment is guaranteed by a bank. Companies use BAs for importing and exporting goods.
- **T-bills:** The U.S. government issues T-bills at a discount, and they have initial maturities of 4, 8, 13, 17, 26, or 52 weeks. T-bills are somewhat unique in that they're sold and quoted on a discount-yield basis (YTM). U.S. government securities — and especially T-bills — are considered to be the safest of all securities.

Here's what a question on money market instruments might look like.

EXAMPLE

SNK Surfboard Company wants to import boogie boards from an Italian manufacturer in Sicily. SNK would use which of the following money market instruments to finance the importing of the boogie boards?

(A) T-bills

(B) Collateral trust bonds

(C) Repurchase agreements

(D) Banker's acceptances

The correct answer is (D). You can eliminate (B) right away because collateral trust bonds aren't money market instruments; they're secured long-term bonds. A BA is like a postdated check that's used specifically for importing and exporting goods.

TIP

Word association can help you here. If you see *importing*, *exporting*, or *time-draft*, your answer is probably BA.

Testing Your Knowledge

Now that you've discovered what you need to know about corporate and U.S. debt securities as far as the SIE exam goes, it's time to try some additional questions (besides the ones within the chapter). Read carefully so that you don't make any careless mistakes.

Practice questions

1. A corporate bond indenture includes which of the following?

   I. The coupon rate

   II. The maturity date

   III. Par value

   IV. Any collateral securing the bond

   (A) I and II

   (B) I, II, and III

   (C) I, II, and IV

   (D) I, II, III, and IV

2. Declan K. has 100 DEF corporate bonds with a coupon rate of 4½ percent. The bonds were purchased at 98 percent of $1,000 par each. How much interest will Declan receive the next time they get paid?

   (A) $2,205

   (B) $2,250

   (C) $4,410

   (D) $4,500

3. Which of the following types of corporate bond issues is most likely to have a sinking fund?

   (A) Term

   (B) Series

   (C) Serial

   (D) None of the above

4. All of the following are types of secured bonds EXCEPT

   (A) mortgage bonds

   (B) collateral trusts

   (C) income bonds

   (D) guaranteed bonds

5. Which of the following is the formula that determines the current yield of a bond?

   (A) Current yield = Semiannual interest divided by the market price

   (B) Current yield = Semiannual interest divided by the par value

   (C) Current yield = Annual interest divided by the market price

   (D) Current yield = Annual interest divided by par value

6. Melissa R. Corporation has issued $6 million worth of 30-year callable bonds with a par value of $1,000, a coupon rate of 5¼ percent, and 7 years call protection. Melissa R. Corporation would least likely call the bonds when interest rates are generally

(A) increasing
(B) decreasing
(C) remaining the same
(D) none of the above

7. Which of the following are possible maturities for a U.S. Treasury bill?

I. 4 weeks
II. 8 weeks
III. 16 weeks
IV. 26 weeks
(A) I and II
(B) I, II, and III
(C) I, II, and IV
(D) I, II, III, and IV

8. Which of the following U.S. government securities has interest payments that vary according to inflation or deflation?

(A) T-bills
(B) T-STRIPS
(C) TIPS
(D) T-notes

9. Which of the following securities are money market instruments?

I. Banker's acceptances
II. T-bills
III. Commercial paper
IV. Treasury notes
(A) I and II
(B) I, II, and III
(C) II, III, and IV
(D) I, II, III, and IV

10. Which of the following are direct obligations of the U.S. government?

I. T-bills
II. GNMA
III. FNMA
IV. T-STRIPS
(A) I and IV
(B) I, II, and III
(C) II, III, and IV
(D) I, II, and IV

11. The last transaction in HIJ 6.50s 2035 was at 99. These HIJ bonds sold

(A) at par value
(B) at a discount
(C) at a premium
(D) cannot be determined

12. For callable bonds, the call provision must stipulate which of the following factors?

(A) The date of maturity
(B) The market value
(C) The call date and coupon rate
(D) The call price and call date

13. When issued, which of the following debt securities would mature in one year or less?

(A) SLMA bonds
(B) Money market securities
(C) U.S. government-issued Treasury notes
(D) Call options

14. When computing dollar prices and accrued interest on municipal bonds, they are typically calculated using

(A) a 30-day month and a 360-day year
(B) a 30-day month and a 365-day year
(C) actual days in a month and a 360-day year
(D) actual days in a month and a 365-day year

15. When would the stability of a portfolio of debt securities be the greatest?

(A) During a time of rising interest rates
(B) During a time of falling interest rates
(C) If the maturities of the debt securities are long-term
(D) If the maturities of the debt securities are short-term

16. These securities are typically traded based on their average life instead of their stated maturity dates.

(A) U.S. government bonds
(B) Asset-backed securities
(C) Corporate callable bonds
(D) Industrial development bonds

Answers and explanations

1. **D.** The indenture of a bond includes the date that the bond matures, the coupon rate, par value (typically, $1,000), collateral securing the bond (if any), and any callable or convertible features.

2. **B.** The coupon rate is based on the par value of the bonds, not the purchase price or market value. Declan purchased $100,000 par value of bonds with a coupon rate of 4½ percent. This means that Declan will receive $4,500 (4½% × $100,000) in interest per year. But you can assume (unless you're told differently in the question) that bonds pay interest semiannually (every six months). So you need to divide the annual interest by 2 to get $2,250 ($4,500/2).

3. **A.** Although all the choices listed may have a sinking fund (a fund for which the issuer sets aside money to pay the bonds off at maturity), term bonds are the ones most likely to have one. Term bonds are issues in which all the bonds are issued at the same time and have the same maturity date.

4. **C.** This question is an *except* question, so you're looking for the one that's not secured. Income bonds are ones issued by a corporation that's in trouble and needs to reorganize. In this case, the issuing corporation would issue these bonds at a deep discount and not make interest payments unless earnings are high enough. Income bonds are considered to be extremely risky and aren't suitable for most investors.

5. **C.** The current yield of a security is the annual rate of return divided by the market price of the security. So if the market price changes, so does the current yield.

6. **A.** A lot of information thrown into this question is meant to confuse you. The question just wants you to know when an issuer would least likely call its bonds. The whole idea of callable bonds is that issuers want the right to call their bonds if interest rates decrease because then they can issue bonds with lower coupon rates. So they'd least likely call their bonds when interest rates are increasing.

7. **C.** T-bills have initial maturities of 4, 8, 13, 17, 26, and 52 weeks. T-bills are short-term U.S. government securities that are issued at a discount and mature at par value.

8. **C.** TIPS pay interest every six months, like T-notes and T-bonds, but have an interest payment that increases or decreases depending on inflation or deflation.

9. **B.** Money market instruments are debt securities that mature in one year or less. They include repurchase agreements, federal funds, commercial paper (some may mature in more than a year), brokered CDs, Eurodollars, BAs, and T-bills.

10. **D.** All the choices listed are directly backed by the U.S. government except for FNMA securities. FNMA is a publicly held corporation that provides capital for certain mortgages. It's privately owned but is still government-sponsored.

11. **B.** Remember par value for a bond is 100 (100 percent of $1,000 par). In this case, the bonds sold at a purchase price of 99 (99 percent of $1,000), so they sold at a discount from par value.

12. **D.** Although the indenture of the bond will provide the par value, coupon rate, and date of maturity, the call provision would provide the call price (what the issuer would pay the holder if calling the bonds) and also the first date that the bonds can be called.

13. **B.** Although call options typically mature in one year or less, they aren't debt securities, so you can count that one out. Out of the other choices, the only debt securities that mature in one year or less at the time of issuance are money market securities.

14. **A.** Logically, you should be able to throw out answers "B" and "C" because there is no way to make them work. If you calculate using 30-day months, it would have to work out to a 360-day year, not 365. Likewise, if you're using actual days in a month, it would have to work out to a 365-day year. Unlike U.S. government securities, which use actual days in a month and a 365-day year, municipal bonds typically compute using 30-day months and 360-day years.

15. **D.** Remember, when interest rates change, short-term debt securities typically change more quickly in price, but long-term debt securities change more in price. Therefore, an investor holding shorter-term debt securities would be holding securities that are more stable in price than someone holding a portfolio of long-term debt securities.

16. **B.** Asset-backed securities, such as GNMAs, are typically traded based on their average life. Asset-backed securities are ones that are backed by assets such as loans, mortgages, and accounts receivable. So, for arguments sake, say an individual takes out a 30-year mortgage; the average life of that mortgage may be 17 years due to that individual moving or refinancing the loan.

IN THIS CHAPTER

- Understanding municipal bond basics
- Comparing general obligation bonds with revenue bonds
- Reviewing other types of municipal bonds
- Recognizing sources of municipal bond information
- Checking your knowledge

Chapter 8
Municipal Bonds: Local Government Debt Securities

Municipal bonds are securities that state governments, local governments, and U.S. territories issue. The municipality uses the money it borrows from investors to fund and support projects, such as roads, schools, sewer systems, hospitals, and so on. Municipal bonds may also be issued to raise money for operating budgets.

Even though you're most likely to spend a majority of your time selling equity securities (stocks), for some unknown reason, the SIE and some of the corequisite exams, such as the Series 7, test heavily on municipal securities. If you've flipped ahead, you may have noticed that this chapter isn't one of the biggest in the book. Why is that? Well, I cover a lot of the bond basics, such as par value, maturity, types of maturities (term, serial, and balloon), and so on, in Chapter 7. Also, you can find some of the underwriting information in Chapter 5.

In this chapter, I cover the SIE exam topics that are going to be tested relating to municipal bonds. This chapter and the real exam focus mainly on the differences between general obligation bonds and revenue bonds. The chapter wraps up with an exam to test your knowledge.

General Obligation (GO) Bonds: Backing Bonds with Taxes

Most SIE municipal test questions are on general obligation (GO) bonds. The following sections help you prepare.

General characteristics of GOs

REMEMBER

When you're preparing to take the SIE exam, you need to recognize and remember a few items that are specific to GO bonds:

- **They fund nonrevenue-producing facilities.** GO bonds aren't self-supporting because municipalities issue them to build or support projects that don't bring in enough (or any) money to help pay off the bonds. GOs fund schools, libraries, police departments, fire stations, and so on.
- **They're backed by the full faith and credit (taxing power) of the municipality.** The taxes received from the people living in the municipality back GO bonds.
- **They often require voter approval.** Because the generous taxes of the people living in the municipality back the bonds, those same taxpayers have the right to vote on the project when a municipality reaches their statutory debt limit.

The following question tests your knowledge of GO bonds.

EXAMPLE

Which of the following projects are MORE likely to be financed by general obligation bonds than revenue bonds (discussed later in this chapter)?

I. New municipal hospital

II. Public sports arena

III. New junior high school

IV. New library

(A) I and II only

(B) III and IV only

(C) I and III only

(D) I, III, and IV only

The correct answer is (B). Remember that GO bonds are issued to fund nonrevenue-producing projects. A new municipal hospital and a public sports arena will produce income that can back revenue bonds. But a new junior high school and a new library need the support of taxes to pay off the bonds and, therefore, are more likely to be financed by GO bonds.

Analyzing GO bonds

The SIE exam tests your ability to analyze different types of municipal securities and help a customer make a decision that best suits their needs. You should be able to analyze a GO bond as you'd analyze other investments. But because they're backed by taxes rather than sales of goods and services (as most corporations are), GO bonds have different components you need to look at when analyzing the marketability and safety of the issue.

Ascertaining marketability

Many items can affect the marketability of municipal bonds, including the characteristics of the issuer, factors affecting the issuer's ability to pay, and municipal debt ratios. You certainly want to steer investors away from municipal bonds that aren't very marketable unless those investors are willing to take extra risk. Here's a list of some of the other items that can affect the bonds' marketability:

- **Quality (rating):** The higher the credit rating, the safer the bond and, therefore, the more marketable it is.

- **Maturity:** Typically, the shorter the maturity, the more marketable the bond issue is.
- **Call features:** Callable bonds are less marketable than noncallable bonds.

  Callable bonds give the issuer the right to call (redeem) the bonds from the holder at certain points before the maturity date.
- **Interest (coupon) rate:** Everything else being somewhat equal, bonds with higher coupon (interest) rates are more marketable.
- **Block size:** The larger the block size (the number of securities sold in the initial offering), the more marketable the bond usually is.
- **Dollar price:** All else being equal, the lower the dollar price, the more marketable the bond is.
- **Issuer's name (local or national reputation):** Bonds are more marketable when the issuer has a good reputation for paying off its bonds on time.
- **Sinking fund:** If the issuer has put money aside to pay the bonds off at maturity, the bonds are more marketable because the default risk is lower.
- **Insurance:** If the bonds are insured against default, they're considered to be very safe and are much more marketable. Bond insurance is considered to be a *credit enhancement.*

REMEMBER

Dealing with debt

One factor that influences the safety of a GO bond is the municipality's ability to deal with debt. After you consider the issuer's name, you can look at previous issues that the municipality had and find out whether it was able to pay off the debt in a timely manner.

In addition to the municipality's name (and credit history), you want to look at its current debt (the debt the municipality owes directly) and its net overall debt (including the debt the issuer owes directly and overlapping debt). *Overlapping debt* is debt that an issuer owes for being part of a larger state and local government. In other words, a town is part of a county and, in turn, is part of a state.

Bringing in taxes, fees, and fines

Taxes — one of life's little certainties — are another factor that influence the safety of GO bonds. Property taxes (collected by local municipalities, not states) and sales taxes are the driving forces behind paying back investors. So, in general, the higher the property values and the larger the tax base, the safer the municipal bond issue is. GOs are also backed by traffic fines, licensing fees, sales taxes, and so on.

REMEMBER

Municipal GO bonds are backed by the huge taxing power of a municipality, so GO bonds usually have higher ratings and lower yields than revenue bonds. Because investors aren't taking as much risk, they don't get as much reward, or *yield*.

Revenue Bonds: Raising Money for Utilities and Such

Unlike the tax-backed GO bonds (see the preceding sections), *revenue bonds* are issued to fund municipal facilities that will generate (or ideally will generate) enough income to support the bonds. These bonds raise money for certain utilities, toll roads, airports, hospitals, student grants offered by certain states, and so on.

A municipality can also issue *industrial development revenue bonds* (IDRs) to finance the construction of a facility for a corporation that moves into that municipality. Even though a municipality issues IDRs, they're backed by lease payments made by a corporation. Because the corporation is backing the bonds, the credit rating of the bonds is derived from the credit rating of the corporation.


REMEMBER

Because IDRs are backed by a corporation rather than a municipality, IDRs are generally considered to be the riskiest municipal bonds. Additionally, because these bonds are issued for the benefit of a corporation, not a municipality, the interest income may not be federally tax-free to investors who are subject to the alternative minimum tax (AMT).

General characteristics of revenue bonds


REMEMBER

Before taking the SIE exam, you need to recognize and remember a couple of items that are specific to revenue bonds:

- **They don't need voter approval.** Because revenue bonds fund a revenue-producing facility and, therefore, aren't backed by taxes, they don't require voter approval. The revenue that the facility generates should be sufficient to pay off the debt.
- **They require a feasibility study.** Before issuing revenue bonds, the municipality hires consultants to prepare a feasibility study. The study answers the question "Does this project make sense?" The study includes estimates of revenue that the facility could generate, along with any economic, operating, or engineering aspects of the project that would be of interest to the municipality.

Analyzing revenue bonds

As with any investment, you need to check out the specifics of the security. When you're gauging the safety of a revenue bond, for example, you want to see whether it has a *credit enhancement* (insurance), which provides a higher degree of safety. You also want to look at *call features* (whether the issuer has the right to force investors to redeem their bonds early). You can assume that if a bond is callable, it has a higher yield than a noncallable bond because the investor is taking more risk. (The investor doesn't know how long they can hold onto the bond.)

For SIE exam purposes, and if you ever sell one or more revenue bond, you also need to be familiar with the revenue-bond-specific items in this section. Municipal revenue bonds involve covenants, wonderful little promises that protect investors by holding the issuer legally accountable. Table 8-1 shows some of the promises that municipalities make on the municipal bond indenture.


TIP

If you see the word *covenant* on the SIE exam or any of the corequisite exams, immediately think of revenue bonds.

Other factors that provide investors a certain degree of comfort are that municipalities must provide financial reports and that they are subject to outside audits for all their revenue bond issues.

TABLE 8-1 Revenue Bond Covenants

Type of Covenant	Promises That the Municipality Will
Rate covenant	Charge sufficient fees to people using the facility to be able to pay expenses and the debt service (principal and interest on the bonds)
Maintenance covenant	Adequately take care of the facility and any equipment so the facility continues to earn revenue
Insurance covenant	Adequately insure the facility

The Primary Market: Bringing New Municipal Bonds to Market

As you can imagine, like corporations and partnerships, municipalities need help selling their issues. To that end, they can choose their underwriter(s) directly, the way almost all corporations and Direct Participation Programs (DPPs) do it, or through a competitive (bidding) process:

- **Negotiated offering:** In this type of offering, the issuer chooses the underwriter(s) (a group of underwriters is called a *syndicate*) directly, with no competition from other underwriters. Like most corporations, municipalities that issue revenue bonds or IDRs typically choose the underwriter(s) directly, although they have the option of taking bids. Like many corporations, municipalities often have a relationship with one or more underwriters that they're comfortable working with. Because revenue bonds aren't backed by taxing power the way GOs are, the issuers aren't obligated to get the best price or coupon rate for their bond issue.
- **Competitive offering:** Because GO bonds are backed by the taxing power of the municipality, the municipal issuers are responsible for getting the best deal for the people who live in their municipality. To ensure the best deal, they post an advertisement known as a notice of sale in the *Daily Bond Buyer* (the main source of information about new municipal bonds), saying that they're accepting bids on a new issue of bonds. At this point, interested underwriters submit a good-faith deposit (to prove their sincerity) and their bids to the issuer. As you may suspect, the winner of the bid will be the underwriter that presents the lowest cost to the taxpayers backing the bond. The lowest cost could be the result of issuing the bond with a lower coupon rate and/or agreeing to pay more to purchase the bonds. Don't be too concerned about the underwriters that don't win; they'll get their good-faith deposit back.


REMEMBER

The notice of sale contains all bidding information about new municipal issues. Besides just saying that it's taking bids, the issuer gives bidding details. It tells potential underwriters where to submit bids, the amount of the good-faith deposit, whether it's expecting bids on the basis of net interest cost (NIC) or true interest cost (TIC, which considers the time value of money), the amount of bonds to be issued, the maturity of bonds to be issued, and so on. It's the responsibility of the underwriters to determine the coupon rate (based on the credit history of the issuer, the amount of outstanding debt, the size of the issue, the tax base, and so on) and selling price of the issue.

An underwriter needs to be able to sell the issue and still make a profit, so the selling price and the coupon rate have to be attractive to investors. You should remember that the difference between the cost the issuer pays for the security and the amount it receives from investors is called the *spread*. For argument's sake, suppose that the underwriter agrees to purchase the bonds for $990 each from the issuer and then reoffer them to the public for $1,000 each; the spread is $10 per bond. The underwriter's profit lies within that spread.

MUNICIPAL ADVISERS

Municipal advisers are firms or professionals that provide professional advice on bond sales and other financial advice to state and local governments. They help the state or local government decide the timing, structure, terms, amount, coupon rate, maturity schedule, and other aspects of borrowing money (issuing debt securities).

Allocation of orders

Under Municipal Securities Rulemaking Board (MSRB) rules, all syndicates must establish an allocation of orders. The allocation of orders states which orders are to be filled first — a priority provision. The allocation of orders must be supplied to customers who request it. The allocation of orders is in the syndicate agreement (agreement among underwriters) and must be signed by all syndicate members. The typical allocation of orders is as follows:

1. Presale orders

   These orders are entered before the date when the securities were officially available for sale.

2. Syndicate (group-net) orders

   In this case, the syndicate member receiving the order credits the sale to all the syndicate members, so all members profit.

3. Designated orders

   For designated orders, the buyer specifies which syndicate member is to profit from the sale.

4. Member orders

   If any securities are left after the presale, syndicate, and designated orders, syndicate members may purchase them for their own portfolios.

Definitions for new issues

The information contained in this section would be covered under the last section as MSRB Rule G-9. Because the rule has to do with the underwriting of municipal securities, however, it makes more sense to cover it in this section. The following list provides some of the terms specifically related to municipal bond underwritings.

- **Date of sale:** The *date of sale* is the date when the bids are submitted to the issuer for competitive offerings. For negotiated offerings, this date is when the syndicate signs the final contract. In both cases, the syndicate manager sends a commitment wire to the other syndicate members on the date of sale.
- **Presale period:** The *presale period* is the period preceding the date of sale.
- **Order period:** The *order period* is the time (established by the syndicate manager) during which syndicate members may solicit customers.
- **Underwriting period:** The *underwriting period* begins when the first order is submitted to the syndicate or when the securities are purchased from the issuer, whichever happens first. The underwriting period ends when the issuer delivers securities to the syndicate or the syndicate sells all the securities purchased from the issuer, whichever happens last.

Examining Other Types of Municipal Bonds on the Test

Along with standard revenue and GO bonds (see the earlier sections on these topics), you're required to know the specifics of the following bonds:

- **Special tax bonds:** These bonds are secured by one or more taxes other than ad valorem (property) taxes. The bonds may be backed by sales taxes on fuel, tobacco, alcohol, business license taxes, and so on.
- **Special assessment (special district) bonds:** These bonds are issued to fund the construction of sidewalks, streets, sewers, and so on. Special assessment bonds are backed by taxes only on the properties that benefit from the improvements. In other words, if people who live a few blocks away from you get new sidewalks, they'll be taxed for it, not you.
- **Double-barreled bonds:** These bonds are a combination of revenue and GO bonds. Municipalities issue these bonds to fund revenue-producing facilities (toll bridges, water and sewer facilities, and so on), but if the revenue taken in isn't enough to pay off the debt, tax revenue makes up the deficiency.
- **Limited-tax general obligation bonds (LTGO):** These bonds are GO bonds for which the taxes backing the bonds are limited. LTGO bonds are secured by all revenue of the municipality that isn't used to back other bonds. The amount of property taxes municipalities can levy to back these bonds is limited, however. If the bond is backed by an unlimited tax pledge, the municipality can raise property tax rates to ensure that the bonds can be paid off, which is good for investors but bad for homeowners.
- **Public housing authority bonds (PHAs):** These bonds, also called new housing authority (NHA) bonds, are issued by local housing authorities to build and improve low-income housing. These bonds are backed by U.S. government subsidies, and if the issuer can't pay off the debt, the U.S. government makes up any shortfalls.

  Because PHAs are backed by the issuer and the U.S. government, they're considered to be among the safest municipal bonds.


TIP

- **Moral obligation bonds:** These bonds are issued by a municipality but backed by a pledge from the state government to pay off the debt if the municipality can't. Given the additional backing of the state, they're considered to be safe. Moral obligation bonds need legislative approval to be issued.

  Because they're called *moral obligation* bonds, the state has a *moral* responsibility — but not a legal obligation — to help pay off the debt if the municipality can't.


REMEMBER

The following question tests your ability to answer questions about the safety of municipal bonds.


EXAMPLE

Rank the following municipal bonds in order from safest to riskiest.

I. Revenue bonds

II. Moral obligation bonds

III. Public housing authority bonds

IV. Industrial development revenue bonds

(A) I, II, III, IV

(B) III, II, I, IV

(C) II, III, IV, I

(D) II, IV, III, I

The correct answer is (B). Remember that PHA bonds are considered to be the safest municipal bonds because they're backed by U.S. government subsidies. (This question's easy, because only one answer starts with III.) Next-safest are moral obligation bonds, which are also considered to be very safe because the state government has a moral obligation to help pay off the debt if necessary. Next come revenue bonds, which are backed by a revenue-producing facility. IDRs are considered to be the riskiest municipal bonds because although they're technically municipal bonds, they're backed only by lease payments made by a corporation.

Taxing Build America Bonds (BABs): Taxable Municipal Bonds

Although the interest on most municipal bonds is federally tax-free and sometimes triple tax-free (the interest is exempt from federal, state, and local taxes), you need to be aware that some bonds issued and backed by a municipality are taxable. These bonds were created under the Economic Recovery and Reinvestment Act of 2009 and are called *Build America Bonds* (BABs). The idea behind the BABs is to help municipalities raise money for infrastructure projects such as tunnels, bridges, roads, and so on. These bonds have either a higher coupon rate than most other municipal bonds because the municipality receives tax credits from the federal government or are more attractive because the investors receive tax credits from the federal government. As a result, these municipal bonds become more attractive to all investors, even ones with lower income-tax rates.

Even though the BAB program expired in 2010, plenty of these bonds are still out there, so you'll be tested on them. The two types of BABs are as follows:

- **Tax Credit BABs:** Investors in these bonds receive tax credits equal to 35 percent of the coupon rate.
- **Direct Payment BABs:** When a municipality issues Direct Payment BABs, it receives reimbursements from the U.S. Treasury equal to 35 percent of the coupon rate. As a result, Direct Payment BABs tend to have a higher coupon rate than Tax Credit BABs.

Municipal Notes: Securing Short-Term Financing

When municipalities need short-term (interim) financing, municipal notes come into play. These notes bring money into the municipality until other revenue is received. Municipal notes typically have maturities of one year or less (usually, three to five months). Know the different types of municipal notes listed below for the SIE exam:

- **Tax anticipation notes (TANs):** These notes provide financing for current operations in anticipation of future taxes, such as ad valorem taxes, that the municipality will collect.
- **Revenue anticipation notes (RANs):** These notes provide financing for current operations in anticipation of future revenue that the municipality will collect.
- **Tax and revenue anticipation notes (TRANs):** These notes are a combination of TANs and RANs.

- **Grant anticipation notes (GANs):** These notes provide interim financing for the municipality while it's waiting for a grant from the U.S. government. The notes are paid off from the grant funds.
- **Bond anticipation notes (BANs):** These notes provide interim financing for the municipality while it's waiting for long-term bonds to be issued.
- **Construction loan notes (CLNs):** These notes provide interim financing, typically for the construction of housing projects. The notes are typically paid back by the money the issuer receives from issuing longer-term bonds.
- **Tax-exempt commercial paper:** These short-term notes are usually issued by organizations such as universities with permission of the government. This debt obligation usually lasts up to 270 days to help the organization cover its short-term liabilities.
- **Variable-rate demand note:** These notes have a variable (floating or fluctuating) interest rate and have a put option (an option to sell back to the issuer). This gives the holder the ability to periodically (typically daily or weekly) return the note to the issuer at the stated value.


REMEMBER

AON (All-or-None) is an order qualifier (fill an entire order at a specific price or not at all) or type of underwriting; it's not a municipal note, no matter how much the "N" of "AON" makes it look like one.

Municipal notes aren't rated the same as municipal or corporate bonds (AAA, AA, A, and so on). Municipal notes have ratings as follows (from best to worst):

- **Moody's:** MIG 1, MIG 2, MIG 3, MIG 4
- **Standard & Poor's:** SP-1, SP-2, SP-3
- **Fitch:** F-1, F-2, F-3

Taking a Closer Look at Municipal Fund Securities

Municipal fund securities are similar to investment company securities (see Chapter 9) but are exempt from that definition under section 2(b) of the Investment Company Act of 1940. Municipal fund securities are established by municipal governments, municipal agencies, or educational institutions but don't represent loans to the government. Included in municipal fund securities are Section 529 savings plans, Achieving a Better Life Experience (ABLE) accounts, and Local Government Investment Pools (LGIPs).

Note: Rule G-45 requires dealers underwriting ABLE programs or 529 savings plans (not LGIPs) to submit information such as plan descriptive information, assets, asset allocation information for each plan available, contributions, performance data, and so on, semiannually and performance data annually through the Electronic Municipal Market Access (EMMA) system. MSRB's EMMA system is designed to provide market transparency to help protect market participants.

Section 529 savings plans

Section 529 savings plans are specialized educational savings accounts available to investors. These plans are also known as *qualified tuition plans* (QTPs) because they're designed to allow

money to be saved for qualified expenses for higher education (colleges, postsecondary trade and vocational schools, postgraduate programs, and so on). As of 2018, the MSRB has also added as qualified higher education expenses tuition at an elementary or secondary public, religious, or private school. A Section 529 plan has an owner (the one who sets up and contributes to the plan — typically, a parent) and a beneficiary (the one who benefits from the plan — typically, a child or relative of the person who set up the plan). The contribution allowance varies from state to state, and contributions are made from after-tax dollars. Withdrawals of the amount invested plus interest received is tax-free, meaning that the earnings grow on a tax-deferred basis, and no tax is due if earnings are used for qualified educational expenses. Investors must receive an official statement or offering circular before opening the account.

You should note the following:

- Contribution levels may vary from one state to another.
- No income limits are placed on the investors in a 529 plan.
- Contributions are typically used to acquire units in a state trust. The assets must be invested in a matter consistent with the trust's investment objectives.
- Many investors contribute monthly, although they aren't required to do so.
- Any account balances that are unused (if, for example, the beneficiary decides not to go to college or goes to a cheaper local college) can be transferred to another immediate family related beneficiary (parents, kids, and/or siblings).
- The assets in the account always remain under the control of the owner (donor) even after the beneficiary becomes of legal age (18, in most states).
- In some cases, plans can be set up as prepaid tuition plans, which allow investors to prepay college at a locked-in rate, or college savings plans, which allow owners to invest as they see fit (aggressively, moderately, or conservatively).

Note: If a registered representative is recommending a 529 savings plan to a customer, they should explain the potential state tax deduction they will receive on their contributions. Remember, the contribution amount and deductibility amount varies from state-to-state.

ABLE (Achieving a Better Life Experience) accounts

ABLE (Achieving a Better Life Experience) programs are designed for people with provable disabilities and their families. Because of the extra needs and expenses (educational, housing, transportation, health, assistive technology, legal fees, and so on) involved in taking care of people with disabilities, ABLE accounts allow people to invest after-tax dollars in an ABLE account. Any earnings or distributions are tax-free as long as they're used to pay for qualified disability expenses for the beneficiary.

ABLE accounts may be opened by the eligible person, a parent or guardian, or a person granted power of attorney on behalf of the person with the disability. After the account is opened, anyone can contribute. As with higher education savings plans (see the preceding section), the investments may be conservative, moderate, or aggressive. Many states have annual contribution caps and maximum account balances. ABLE accounts may be opened for a disabled person even if they are receiving other benefits, such as Social Security disability, Medicaid, or private insurance. To be eligible, the onset of the disability must have been discovered before the person reached age 26.

LGIPs (Local Government Investment Pools)

LGIPs are established by states to provide other government entities (cities, counties, school districts, and so on) a short-term investment vehicle for investing their funds. Because these pools are set up by state governments for state entities, LGIPs are exempt from registration with the U.S. Securities and Exchange Commission (SEC). As a result, no prospectus is required, but LGIPs have disclosure documents to cover investment policies, operating procedures, and so on. Although they aren't money market funds, they're similar in the fact that many of them operate like those funds. Like money market funds, LGIPs typically set the net asset value (NAV) at $1, and normally, the money is invested safely, although it doesn't have to be. LGIPs may be sold directly to municipalities or through Municipal Advisers hired by the municipal issuers.

Understanding the Taxes on Municipal Bonds

Municipal bonds typically have lower yields than most other bonds. You may think that because U.S. government securities (T-bills, T-notes, T-bonds, and so on) are the safest of all securities, they should have the lowest yields. That's not so, because municipal bonds have a tax advantage that U.S. government bonds don't have: The interest received on municipal bonds, with a few exceptions (see the earlier section "Taxing Build America Bonds (BABs): Taxable Municipal Bonds") is federally tax-free. (The interest on most U.S. government securities is free of state taxes.)

Comparing municipal and corporate bonds equally

The *taxable equivalent yield* (TEY) tells you what the interest rate of a municipal bond would be if it weren't federally tax-free. You need the following formula to compare municipal bonds and corporate bonds equally:

$$\text{taxable equivalent yield (TEY)} = \frac{\text{municipal yield}}{100\% - \text{investor's tax bracket}}$$

REMEMBER

Because the investor's tax bracket comes into play with municipal bonds, municipal bonds are better suited for investors in higher tax brackets.

The following question tests your TEY knowledge.

EXAMPLE

Mrs. Stevenson is an investor who's in the 32 percent tax bracket. Which of the following securities would provide Mrs. Stevenson the BEST after-tax yield?

(A) 5 percent GO bond

(B) 6 percent T-bond

(C) 7 percent equipment trust bond

(D) 7 percent mortgage bond

The right answer is (A). If you were to look at this question straight up without considering any tax advantages, the answer would be (C) or (D). But you have to remember that the investor has to pay federal taxes on the interest received from the T-bond, equipment trust bond, and

mortgage bond but doesn't have to pay federal taxes on the interest received from the GO municipal bond. So, you need to set up the TEY equation to compare all the bonds equally:

$$\text{taxable equivalent yield (TEY)} = \frac{\text{municipal yield}}{100\% - \text{investor's tax bracket}} = \frac{5\%}{100\% - 32\%} = \frac{5\%}{68\%} = 7.35\%$$

Looking into the SIE examiners' heads, you have to ask yourself, "Why would they be asking me this question?" Well, they want to make sure that you know that the interest received on municipal bonds is federally tax-free. Therefore, if you somehow forget the formula, you're still likely to be right if you pick a municipal bond as the answer when you get a question like the preceding one.

Note: Although this situation is less likely, the SIE may ask you to determine the *municipal equivalent yield* (MEY), which is the yield on a taxable bond after taxes. When you have that yield, you can compare it with a municipal bond to determine the best investment for one of your customers. The formula for the municipal equivalent yield is as follows:

$$\text{MEY} = \text{municipal yield} \times (100 - \text{investor's tax bracket})$$

Scot-free! Taking a look at triple tax-free municipal bonds

Bonds that U.S. territories (and federal districts) issue are triple tax-free; the interest is not taxed on the federal, state, or local level. These places include

- Puerto Rico
- Guam
- U.S. Virgin Islands
- American Samoa
- Washington, D.C.

Additionally, in most cases (a few exceptions exist), if you buy a municipal bond issued within your own state, the interest will be triple tax-free.


TIP

Unless you see the U.S. territories or Washington, D.C. in a municipal bond question, don't assume that the bonds are triple tax-free. Even if the question states that the investor buys a municipal bond issued within their own state, don't assume that it's triple tax-free unless the question specifically states that it is.


REMEMBER

The tax advantage of municipal bonds applies only to interest received. If investors sell municipal bonds for more than their cost basis, they have to pay taxes on the capital gains.

Following Municipal Bond Rules

Yes, unfortunately, the SIE tests you on rules relating to municipal bonds. Rules are part of life and part of the SIE exam. This section covers just a few rules that are specific to municipal securities, but if you're itching for more regulations, don't worry — you can see plenty more rules in my favorite chapter: Chapter 16.

Confirmations

All confirmations of trades must be sent or given to customers at or before the completion of the transaction (settlement date). Municipal securities settle the regular way (two business days after the trade date, or T+2). The following items are included in the confirmation:

- The broker–dealer's name, address, and phone number
- The capacity of the trade (whether the firm acted as a broker or dealer)
- The dollar amount of the commission (if the firm is acting as a broker)
- The customer's name
- Any bond particulars, such as the issuer's name, interest rate, maturity, and call features (if any)
- The trade date, time of execution, and settlement date
- Committee on Uniform Securities Identification Procedures (CUSIP) identification number (if there is one)
- Bond yield and dollar price
- Any accrued interest
- The registration form (registered as to principal only, book entry, or fully registered)
- Whether the bonds have been called or pre-refunded

Each broker, dealer, or municipal securities dealer must report to the MSRB all transactions in municipal securities through the Real-Time Reporting System (RTRS). The RTRS makes public reports on market activity and prices. In addition, the MSRB assesses transaction fees to make sure that they're in line with MSRB rules. The information of a transaction must be reported promptly. Exempt from the reporting process are transactions in securities without a Committee on Uniform Security Identification Procedures (CUSIP) number, transactions in municipal fund securities, and interdealer transactions (over the counter trades between one financial institution and another).

Advertising and record keeping

A brokerage firm has to keep all advertising for a minimum of three years, and these ads must be easily accessible (not in a bus storage locker) for at least two years.

The MSRB requires a principal (manager) to approve all advertising material of the firm before its first use. The principal must ensure that the advertising is accurate and true.


REMEMBER

Advertising includes any material designed for use in the public media. Advertising includes offering circulars, market and form letters, summaries of official statements, and so on. Preliminary and final official statements aren't considered to be advertising because they're prepared by the issuer; therefore, they don't require approval from a principal.

Gifts

According to MSRB rules, municipal securities dealers can't give customers gifts valued at more than $100 per year. (The board kind of has this thing against bribery.) Business expenses are exempt from the rule.


TIP

If you get a question on the SIE exam relating to what qualifies as a gift, remember that business expenses are exempt. Business expenses can be airline tickets (for the customer to meet with you, not for the customer to vacation in the Bahamas), hotel expenses (for the customer's lodging while they're meeting with you), business meals, and so on. You should note that FINRA gift rules fall directly in line with MSRB's gift rules.

Commissions

Although no particular guideline states what percentage broker–dealers can charge (as with the 5-percent markup policy; see Chapter 16), all commissions, markups, and markdowns must be fair and reasonable, and policies can't discriminate among customers. The items that firms should consider follow:

- The market value of the securities at the time of the trade.
- The total dollar amount of the transaction. Although you're usually going to charge more money for a larger transaction, the percentage charged is usually lower.
- The difficulty of the trade. If you had to jump through hoops to make sure that the trade was completed, you're entitled to charge more.
- The fact that you and the firm that you work for are entitled to make a profit (which, of course, is the reason you got involved in the business to begin with).

You can't take into account a client's race, ethnicity, religion, gender, gender identity, sexual orientation, disability, age, or accent, or how much you like (or dislike) the client.

Gathering Municipal Bond Info

As with other investments, you need to be able to locate information if you're going to sell municipal securities to investors. You may find that information about municipal bonds isn't as readily available as it is for most other securities. Some municipal bonds are relatively *thin* issues (not many are sold or traded) or may be of interest only to investors in a particular geographic location. This section reviews some of the information that you have to know to ace the SIE exam.

The bond resolution (indenture)

A *bond resolution* (indenture) provides investors contract terms including the coupon rate, years until maturity, and collateral backing the bond (if any). Almost every municipal bond comes with a bond indenture, which is printed on the face of most municipal bond certificates. A bond indenture isn't required by law, but it makes the bonds more marketable because it serves as a contract between the municipality and a trustee that's appointed to protect the investors' rights. Included in the indenture are the *flow of funds* (how the money collected from the revenue-producing project is distributed) and any assets that may be backing the issue.

Legal opinion

Printed on the face of municipal bond certificates, the legal opinion is prepared and signed by a municipal bond counsel (attorney). The purpose of the legal opinion is to verify that the issue is legally binding on the issuer and conforms to tax laws. Additionally, the legal opinion may state that interest received from the bonds is tax-exempt.

REMEMBER

If a bond is stamped *ex-legal*, it doesn't contain a legal opinion.

Official statement

Municipal bonds don't have a prospectus; instead, municipalities usually provide an official statement. Like prospectuses, official statements come in *preliminary* and *final versions*. The preliminary version of the statement doesn't include an offering price or coupon rate. The *official statement* (OS) is the document that the issuer prepares or has prepared; it states what the funds will be used for, provides information about the municipality, and offers details how the funds will be repaid. The official statement also includes:

- The offering terms
- The underwriting spread (basically, who gets what)
- A description of the bonds
- A description of the issuer
- The offering price
- The coupon rate
- The feasibility statement (for revenue bonds — how much sense the project makes)
- The legal opinion (unless stamped ex-legal)

Any dealer selling municipal securities to a customer during the issue's underwriting period (see "The Primary Market: Bringing New Municipal Bonds to Market" earlier in this chapter) must deliver a final official statement, if there is one, to a customer by the settlement of the transaction. If a dealer is selling a new issue to another dealer, it must deliver the official statement to the purchasing dealer within one business day.

"G" That's a Whole Lot of Rules

Yes, there are a lot of "G" rules. You'll have to study even more before you take some of the corequisite exams, such as the Series 7. Some of these rules would be taller than you if they were printed out, even if you're tall enough to give Shaquille O'Neal a run for his money.

TIP

The following list isn't as huge as it could be because many of the rules are already covered throughout this book. But you're not expected to know the minute details of each rule — just the main idea. Fortunately, many of the rules just make sense. Also, don't worry about the rule numbers; pay more attention to the rule.

- **Rule G-2** (standards of professional qualifications): Before effecting any transaction (solicitation, negotiation of terms, or execution of a trade) in — or inducing or attempting to induce the purchase or sale of — any municipal security, the dealer and every person associated with that dealer must be qualified in accordance with MSRB rules.
- **Rule G-3** (professional qualification requirements): Broker–dealers that conduct a business in general securities must have at least one associated person qualified as a municipal securities principal to oversee and supervise their municipal securities business.
- **Rule G-7** (information concerning associated persons): Associated persons (municipal securities sales principal, municipal securities principal, general securities principal engaging in

municipal securities business, municipal securities representative, limited representatives, and so on) must provide their employer a form U-4 or MSD-4 for bank dealers. A U-4 form is an application form sent to the Central Registration Deposit (CRD) along with the applicant's fingerprints. Included in the form are the applicant's address, work history, arrest record (if any — ideally not), education, previous addresses, and so on. A copy of the form must be kept by the employer. In addition, the employer is responsible for calling previous employers to find out whether the information in the form is accurate. In the event that the applicant's information changes any time during employ, the employer is responsible for updating the information.

- **Rules G-8 and G-9** (books and records requirements): All brokers, dealers, and municipal securities dealers must keep records regarding municipal securities business. Among the many items they have to keep are the following:
  - Records of original entry (blotters): Itemized daily records of all purchases and sales of municipal securities
  - Account records: Account records for each customer account
  - Securities records: Separate records showing all municipal securities positions
  - Subsidiary records: Records of municipal securities in transfer, municipal securities borrowed or loaned, municipal securities transactions not completed by the settlement date, and so on
  - Put options and repurchase agreements
  - Records for agency transactions
  - Records concerning primary offerings
  - Copies of confirmations (for more on confirmations, see Chapter 16)
  - Customer account information
  - Customer complaints
  - Records concerning political contributions

  
  TIP

  You aren't expected to remember the entire preceding list. Just get a general feeling for what's required. It looks as though the MSRB wants the broker–dealer or municipal securities dealer to maintain records of just about everything.
- **Rule G-9** (preservation of records): MSRB's record-keeping requirements are very similar to (but not exactly the same as) FINRA's requirements. Most records have to be kept for four or six years. To keep you from pulling your hair out (this coming from a bald man), look at the record-keeping requirements in Chapter 16, where I note how the MSRB rules and FINRA rules differ.
- **Rule G-10** (delivery of investment brochure): Broker–dealers and municipal securities dealers must send yearly written statements (which may be electronic) to each customer, stating that they're registered with the SEC and MSRB. The statement must also include the web address for the MSRB and a statement of how to receive an investment brochure on the website describing customer protections and how to file a complaint to the proper authority. The same information holds true of Municipal Advisers, who must also send yearly statements with the same information as well as provide information on how to get the client brochure on the MSRB website.
- **Rule G-13** (quotations): According to MSRB rules, all quotations for municipal securities published or distributed by any broker–dealer, municipal securities dealer, or person associated with a broker–dealer or municipal securities dealer must be genuine.

- **Rule G-17** (conduct of municipal securities and municipal adviser activities): Municipal securities broker–dealers, municipal securities dealers, Municipal Advisers, agents, and so on shall deal fairly with all people and not engage in dishonest, deceptive, or unfair practices.
- **Rule G-18** (best execution): When entering into a municipal securities transaction with a customer or customer of another broker, dealer, or municipal securities dealer, a broker must use reasonable diligence to attempt to get the best price for the security (lowest buying price or highest selling price for the customer). This rule is similar to Rule G-30, but G-30 includes markups, markdowns, and commission.
- **Rule G-21** (advertising): Advertisements by municipal securities dealers, brokers, and dealers can't contain false or misleading statements. Advertisements include published material used in electronic or other public media, promotional literature (written or electronic) made available to customers or the public, circulars, market letters, seminar text, press releases, and so on. Preliminary official statements, official statements, offering circulars, and so on aren't considered to be advertisements.
- **Rule G-25** (improper use of assets): Brokers, dealers, and municipal securities dealers shall not make improper use of municipal securities or funds held on behalf of another person. In addition, no broker, dealer, or municipal securities dealer can make a guarantee against loss, and they may not share directly or indirectly in the profit or losses in a customer's account. An associated person may set up a partnership or joint account with a customer and share in the profits or losses based on the contribution made into the account. In that case, a proportionate sharing agreement should be in place.
- **Rule G-30** (pricing and commissions): If buying or selling municipal securities for a customer on a principal basis (for or from the dealer's inventory), the aggregate price (including the markdown or markup) must be fair and reasonable. If buying or selling municipal securities on an agency basis for a customer, the broker–dealer is responsible for making a reasonable effort to obtain the best price for the customer, and the commission charged must be fair and reasonable in relation to prevailing market conditions.
- **Rule G-34** (CUSIP numbers, new issue, and market information requirements): For new issues of municipal bonds (whether negotiated or competitive offerings), the managing underwriters must apply to CUSIP to receive identification numbers for the bonds for each maturity, if more than one. For negotiated offerings in which the underwriter is chosen directly, the managing underwriter must apply before the pricing of the new municipal issue. For competitive offerings, the managing underwriter must apply after winning the bid. In the event that the municipal issuer hired an adviser, the municipal adviser must apply no later than the business day after the notice of sale is published.
- **Rule G-37** (political contributions and prohibitions on municipal securities business): This rule prohibits brokers, dealers, municipal securities dealers, and Municipal Advisers from engaging in municipal adviser business with municipal entities if they've made political contributions to officials of such municipal entities. If a political contribution was made as described in the first sentence, they're not allowed to engage in municipal securities business with that municipal entity for a period of two years after the contribution. *Municipal finance professionals* (MFPs) are allowed to make political contributions of up to $250 per election to a candidate they're entitled to vote for.
- **Rule G-47** (time of trade disclosure): Brokers, dealers, and municipal securities advisers may not trade a municipal security (buy from or sell to) with a customer (whether solicited or unsolicited) without providing all material information about the trade. The information must be provided before or at the time of sale and can be disclosed orally or in writing.

  If you're dying to know, you can view a complete list of what the MSRB considers to be material information at `www.msrb.org/Rules-and-Interpretations/MSRB-Rules/General/Rule-G-47.aspx`. It shouldn't be necessary to commit this information to memory.

Testing Your Knowledge

Other than the TEY formula, there wasn't much in the way of math in this chapter. Anyway, here's a 15-question quiz to help you get a feel for the type of municipal securities questions you're likely to see on the SIE exam.

Practice questions

1. Which of the following municipal securities could have a rating of MIG 2?

   I. PN

   II. Tax-exempt commercial paper

   III. TRAN

   IV. IDR

   (A) I and III

   (B) I, II, and III

   (C) I, III, and IV

   (D) II, III, and IV

2. Which of the following is NOT TRUE about general obligation bonds?

   (A) They are backed by the taxing power of the municipality.

   (B) They are issued to fund revenue-producing facilities.

   (C) They are subject to a debt ceiling.

   (D) They need voter approval to be issued.

3. A municipal securities broker-dealer sells 100 GO bonds to a customer on a principal basis. How much of a markup may the broker–dealer charge?

   (A) 5% of the selling price

   (B) 8% of the selling price

   (C) 8½% of the selling price

   (D) Whatever is fair and reasonable

4. Which of the following documents include all relevant information about a municipal issuer?

   (A) Official statement

   (B) Notice of sale

   (C) Prospectus

   (D) Indenture

5. A special assessment bond is backed by

   (A) a private user

   (B) excise taxes

   (C) charges on the benefitted property

   (D) a revenue-producing facility

6. According to MSRB rules, brokerage firms must keep all municipal securities advertising

   I. for a minimum of 3 years

   II. for a minimum of 6 years

   III. easily accessible for a minimum of 1 year

   IV. easily accessible for a minimum of 2 years

   (A) I and III

   (B) I and IV

   (C) II and III

   (D) II and IV

7. Municipal bonds issued by each of the following would be triple tax-free EXCEPT

   (A) Hawaii

   (B) Guam

   (C) Washington, D.C.

   (D) Puerto Rico

8. Municipal bonds settle the regular way in

   (A) 1 business day after the trade date

   (B) 2 business days after the trade date

   (C) 3 business days after the trade date

   (D) 4 business days after the trade date

9. Under MSRB rules, how often must broker–dealers and municipal securities dealers send out investment brochures to their customers stating that they are registered with the SEC and MSRB?

   (A) Once, before the customer opening the account

   (B) Once, within 60 days of the customer opening the account

   (C) Once, any time before the first transaction

   (D) Once a year

10. According to MSRB rules, which of the following are considered to be forms of advertising?

    I. Market letters

    II. Seminar text

    III. Official statements

    IV. Offering circulars

    (A) I only

    (B) I and II

    (C) I, II, and III

    (D) I, II, III, and IV

11. What is the taxable equivalent yield for an investor purchasing a 5 percent municipal bond if they're in the 24 percent tax bracket?

(A) 5%

(B) 5.88%

(C) 6.14%

(D) 6.58%

12. All of the following are types of municipal notes EXCEPT

(A) PN

(B) TRAN

(C) AON

(D) CLN

13. Which of the following IS NOT a type of municipal fund security?

(A) Section 529 plans

(B) ABLE accounts

(C) LGIPs

(D) LTGOs

14. All things being equal, which of the following municipal bonds would most likely have the lowest coupon rate?

(A) Special assessment bonds

(B) LTGOs

(C) PHAs

(D) IDRs

15. Under MSRB rules, all syndicates must establish an allocation of orders, which states which orders are to be filled first. Place the typical allocation of orders in order from first to be filled to last to be filled.

I. Member

II. Designated

III. Syndicate

IV. Presale

(A) IV, III, II, I

(B) I, II, III, IV

(C) II, I, III, IV

(D) III, IV, I, II

16. Which type of security provides holders with a floating interest rate, a stated maturity date, and an option to put the security back to the issuer on a daily or weekly basis?

(A) Fixed annuities

(B) Build America Bonds

(C) Variable-rate demand notes

(D) GNMAs

Answers and explanations

1. **B.** MIG (Moody's Investment Grade) ratings are for municipal notes (short-term municipal securities). Municipal notes include TANs, RANs, TRANs, GANs, BANs, CLNs, PNs, and tax-exempt commercial paper. IDRs (Industrial Development Revenue bonds) are long-term debt securities issued by a municipality backed by a private user.

2. **B.** If you look at (A) and (B), they more or less contradict each other, so it makes sense that one of them is the answer. General obligation (GO) bonds are backed by the municipality's taxing power while revenue bonds are backed by money collected from revenue-producing facilities. Therefore, (B) is the correct answer for this question.

3. **D.** There is no set rule as far as the percentage that a municipal broker–dealer may charge when buying or selling municipal securities. Because this trade was executed out of the broker–dealer's inventory, you would expect that the amount that the broker–dealer would charge would be relatively low. The rule is "whatever is fair and reasonable," meaning that if the broker–dealer expended a lot of effort getting the securities, they would not be in violation if charging extra.

4. **A.** Municipal bonds don't have a prospectus. Instead, they have an official statement. Official statements, like prospectuses, come in preliminary and final versions. If prepared, an official statement would contain things like the offering terms, a description of the bonds being offered, a description of the issuer, the bond offering price, the coupon rate, and the maturity.

5. **C.** A special assessment (special district or special purpose) bond is backed on taxes on the properties that benefit from the improvement(s).

6. **B.** Under MSRB rules, all municipal securities advertising must be kept on file for a minimum of three years and kept easily accessible for at least two years.

7. **A.** U.S. territory bonds and bonds issued by federal districts are triple tax-free (exempt from federal, state, and local tax). Bonds issued by the state of Hawaii are not, however. The triple tax-free bonds you should be aware of are the ones issued by Puerto Rico, Guam, U.S. Virgin Islands, American Samoa, and Washington, D.C.

8. **B.** Municipal securities trades settle the regular way in two business days after the trade date (T+2, which is trade date plus two business days).

9. **D.** Broker–dealers and municipal securities dealers must send yearly statements to their clients, which may be in electronic form (emails and such). These statements must let the clients know that their firm is registered with the SEC and MSRB. The statement must let clients know their protections, how they can make a complaint to the proper authority, and so on.

10. **B.** Advertisements include promotional literature (written and electronic), circulars, market letters, seminar text, press releases, and so on. Preliminary official statements, official statements, offering circulars, and so on are not considered to be advertisements.

11. **D.** Because the interest received on municipal bonds is federally tax-free, you have to determine the taxable equivalent yield to be able to compare municipal bonds and corporate bonds equally. So, when you're using the taxable equivalent yield (TEY) formula, you're looking at what a corporate bond would have to yield to be equal to this municipal bond after taxes. See the following formula:

$$\text{TEY} = \frac{\text{municipal yield}}{100\% - \text{investor's tax bracket}} = \frac{5\%}{100\% - 24\%} = \frac{5\%}{76\%} = 6.58\%$$

So, for this investor in the 24 percent tax bracket, buying a 5 percent municipal bond is equivalent to purchasing a 6.58 percent corporate bond after taxes.

12. **C.** Municipal notes are short-term (one year or less) debt securities issued by municipalities to cover a short-term need. These include TANs, RANs, TRANs, GANs, BANs, CLNs, PNs, and tax-exempt commercial paper. AON (all-or-none) is an order qualifier and not a type of municipal note.

13. **D.** Section 529 plans (qualified tuition plans), ABLE (Achieving a Better Life Experience) accounts, and LGIPs (Local Government Investment Pools) are all types of municipal fund securities. LTGOs (Limited-Tax General Obligation) bonds are general bonds issued in which the backing municipality is limited on the property taxes they can collect from the people in their municipality backing the bond.

14. **C.** Remember, more risk equals more reward, so in most cases, riskier bonds are going to have a higher coupon rate and safer bonds a lower coupon rate. Out of the choices given, PHA (Public Housing Authority) bonds are the safest because they are backed by U.S. government subsidies.

15. **A.** Typically, a syndicate sets up the way their orders are to be filled as follows: presale, syndicate (group-net), designated, member.

16. **C.** Variable-rate demand notes are municipal securities that have a variable interest rate as well as a put option, which allows the holder to sell the bond back to the issuer at a stated value.