Chapter 18

Investing in Bonds

18.1 Evaluating Bonds
18.2 Buying and Selling Bonds
Lesson 18.1
Evaluating Bonds

Learning Objectives
LO 1-1 Describe the characteristics and different types of corporate bonds.
LO 1-2 Describe different types of government bonds.
Corporate Bonds

- Bonds are loans (debt) that must be repaid at maturity.
  - *Bondholders* (those who invest in bonds) receive interest twice a year.
  - **Bond redemption** occurs when the bond is paid off at maturity.
  - Bond maturities typically range from 1 to 30 years.
Face Value

- **Face value** is the amount the bondholder will be repaid at maturity.
- Face value is also referred to as *par value* because the face value is the dollar amount printed on the certificate.
- All corporate bonds are issued with a stated face value and fixed contract rate.
Features of Corporate Bonds

- Corporate bonds are sold on the open market through brokers, just like stocks.
- Bonds are known as *fixed-rate investments*.
  - Fixed-rate investments pay a specified amount of interest on a regular schedule.
  - A bond’s interest does not go up and down.
Features of Corporate Bonds

- A bond’s contract rate (also called its interest rate) is the percentage of face value that the bondholder will receive as interest each year.
  - Usually, payments of half the annual interest are made twice a year.
  - Interest received on corporate bonds is taxable.
Features of Corporate Bonds

- **Registered bond**
  - A registered bond is recorded in the owner’s name by the issuing company.
  - Interest checks for registered bonds are mailed semiannually, directly to the bondholder.
  - Today, most bonds are registered.

- **Coupon bond**
  - A coupon bond (also called a bearer bond) is not registered by the issuing company.
  - To collect interest on a coupon bond, bondholders must clip a coupon and then cash it in at a bank, following the procedures outlined by the issuer.
Types of Corporate Bonds

- Debentures
- Secured (mortgage) bonds
- Convertible bonds
- Callable bonds
- Zero-coupon bonds
A debenture is a corporate bond that is based on the general creditworthiness and reputation of the company.

- The issuer does not pledge any specific assets to assure repayment of the loan.
- Debentures are considered *unsecured bonds*.
A secured bond, also called a mortgage bond, is backed by specific assets which serve as security to assure repayment of the debt.

- If the corporation fails to repay the loan as agreed, the bondholder may claim the property used as security for the debt.
- The asset most often used for security is real estate; a building or some other type of property.
A convertible bond is a corporate bond that can be converted to shares of common stock.

- If the bondholder converts to common stock, the bond is no longer due and payable at maturity.
- Convertible bonds can be exchanged for a certain number of common shares at a specific price per share.
Callable Bonds

- A **callable bond** is a bond that the issuer has the right to pay off (call back) before its maturity date.

- The date when a bond can be called is identified at the time it is offered for sale.

- Corporations usually agree not to call bonds for the first five years after issuance.
Zero-Coupon Bonds

- A **zero-coupon bond** is sold at a deep discount, makes no interest payments, and is redeemable for its face value at maturity.
- These bonds may also be issued by the U.S. government or municipalities.
- As the bond progresses toward maturity, it may appreciate, or increase in value.
- The bondholders make money by selling the bonds before maturity at a price higher than they paid for them.
- Or, they can hold the bonds to maturity and receive the face value and interest.
Government Bonds

- Municipal bonds
  - Revenue bonds
  - General obligation bonds (GO)
- Savings bonds
- Treasury securities
- Agency bonds
Municipal Bonds

- A bond issued by state and local governments is called a municipal bond.
- Municipal bonds are also known as munis.
- Municipal bonds generally pay a lower interest rate than corporate bonds.
- The interest is exempt from federal taxes (and often state and local taxes as well), so the effective rate is higher than the stated rate.
Types of Municipal Bonds

- A **revenue bond** is a municipal bond issued to raise money for a public-works project.
  - The revenues (income) generated by the project are used to pay the interest and repay the bonds at maturity.
  - Major projects financed by revenue bonds include airports, hospitals, toll roads, and public housing facilities.

- A **general obligation bond** (or GO) is a municipal bond backed by the power of the issuing state or local government to levy taxes to pay back the debt.
### Comparing Taxable and Tax-Exempt Bonds

<table>
<thead>
<tr>
<th></th>
<th>Corporate Bond</th>
<th>Municipal Bond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face Value (Principal)</td>
<td>$10,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>Rate of Interest</td>
<td>X 6%</td>
<td>X 5%</td>
</tr>
<tr>
<td>Amount of Annual Interest</td>
<td>$600</td>
<td>$500</td>
</tr>
<tr>
<td>Tax on Interest Earned (28%)</td>
<td>– 168</td>
<td>0</td>
</tr>
<tr>
<td>Net Interest</td>
<td>$432</td>
<td>$500</td>
</tr>
</tbody>
</table>
Savings Bonds

- U.S. savings bonds are available as Series EE and Series I bonds.
- U.S. savings bonds can no longer be purchased from banks, credit unions or other financial institutions, but must be purchased online.
- You can buy up to $10,000 worth of these bonds a year.
Savings Bonds

- **Series EE and Series I**
  - Both Series EE and Series I bonds are sold at their face value. Interest is taxable at the federal level, but exempt from state or local income taxes.
  - These bonds are available in amounts ranging from $25 to $10,000.
  - Paper certificates are no longer issued except for those who: (1) want to replace lost bonds or change beneficiary or co-owner names, or (2) wish to exchange their tax refund for a Series I bond.
Treasury Securities

- Treasury securities are virtually risk-free, since they have the backing of the U.S. government.
- They are taxable at the federal level, but are exempt from state and local income taxes.
- They are issued through a bank, broker, or online through the TreasuryDirect website.
Treasury Securities

- Types of treasury securities
  - Treasury notes
  - Treasury bills
  - Treasury bonds

- These investments exist as bookkeeping entries in the records of the U.S. Treasury Department itself or in the records of commercial banks.
Agency Bonds

- When you purchase an agency bond, you are loaning money to a government agency (backed by the federal government) or to a GSE (not backed; may have default risk).

- Government sponsored enterprises (GSEs) are federally-chartered corporations that issue the bonds, are publicly owned by stockholders, and include:
  - Federal Home Loan Mortgage Corp. (Freddie Mac)
  - Federal National Mortgage Assoc. (Fannie Mae)
  - Federal Farm Credit Banks
Agency Bonds

- Other government agencies do not issue bonds directly, but the bonds are backed by the government.
  - The Small Business Administration (SBA)
  - The Federal Housing Administration (FHA)
  - The Government National Mortgage Association (Ginnie Mae)

- Agency bonds usually require a minimum investment, are basically risk free, and are exempt from state and local taxes, but not federal taxes.
Lesson 18.2

Buying and Selling Bonds

Learning Objectives

LO 2-1 Explain how to buy and sell bonds, considering both risk and return.

LO 2-2 Explain how to read the bond listings.
Owning Bonds

- Full-service broker
- Discount broker
- Banks
- Federal Reserve System
Owning Bonds

- When stock prices are falling, bond prices tend to rise, and vice versa. As a result, bond investments serve as a hedge to help offset the risk of the stocks in your portfolio.

- A **hedge** is any investment or action that helps offset against loss from another investment or action.

- Hedging is a tactic used to reduce overall risk.
Buying Bonds

- You cannot purchase U.S. savings bonds at financial institutions.
- You can buy corporate bonds, municipal bonds, and agency bonds through banks or brokers.
- In most states, you can set up a bank account to buy municipal bonds.
Primary and Secondary Markets

- Corporate, municipal, and agency bonds can be purchased on the **primary market**, also known as the **new issue market**.
  - Investors can buy stocks and bonds when they are first issued.

- However, most of these bonds are purchased on the **secondary market**.
  - Investors buy and sell previously issued stocks and bonds from one another with the help of brokers.
Primary and Secondary Markets

- Price is one of the biggest differences between buying bonds on the primary market versus the secondary market.
- In the primary market, investors pay only the face value of the bond.
- In the secondary market, the price of the bond is affected by interest rates in the market and by supply and demand.
Return on Bonds

- Investors earn daily interest for each bond they own.
- Investors redeem the bond for its face value at maturity.
  - **Bond redemption** occurs when it is paid off at maturity.
  - The issuer of the bond pays back the original amount that was borrowed.
- Investors can sell a bond before maturity.
  - Bonds often appreciate in value, especially when interest rates are dropping.
  - Bondholders may be able to sell the bond before maturity for a price higher than they paid for it.
Return on Bonds

- Bonds are a safer investment than many other choices because they have a fixed interest rate and represent a loan that the issuer must repay.
- Bond prices tend to remain steadier than stock prices.
- Bond prices tend to react in the opposite direction of stock prices.
Risk on Bonds

To help investors evaluate the risk level of different bonds, independent rating services rate bonds according to their safety.

A bond rating tells the investor the risk category that has been assigned to a bond.
Investment-grade Bonds

- Bond rating services base their ratings on the creditworthiness of the issuing corporation or municipality.
- A bond with a rating of Baa or higher in Moody’s, or BBB or higher in Standard & Poor’s, is considered an investment-grade bond.
- Investment-grade bonds are considered to be high-quality, low-risk bonds.
- The higher the bond’s rating, the lower the interest rate you will earn.
A **junk bond** has a low rating, or no rating at all.

- Any bond with a rating of Ba/BB or lower is called a junk bond.
- Junk bonds are categorized as *speculative*.
- In most cases, interest rates on junk bonds are high because they are high risk, since the companies issuing them are not financially sound.
Bond Default

- **Bond default** means that the bond issuer cannot meet the interest and/or principal payments.
- Because bonds are not insured, investors can lose their money if the corporation or municipality defaults.
Bond Fund

- To lower risk in owning bonds, many investors choose to buy into investment pools of various types of bonds rather than buying individual bonds.

- A **bond fund** is a group of bonds that have been bundled together and sold in shares (like stock) to investors.

  - Typically, a bond fund would contain some investment-grade bonds along with bonds of some newer companies, foreign bonds, and a few junk bonds as well.

  - Mutual funds, brokers, and investment services at financial institutions offer bond funds to their customers as a way of hedging against risk.
## Reading Corporate Bond Listings

### Excerpt from stock exchange (bond) listings:

<table>
<thead>
<tr>
<th>Name</th>
<th>Type/Rating</th>
<th>Coup.</th>
<th>Mat.</th>
<th>3 p.m. Bid</th>
<th>Net Chg.</th>
<th>Yld</th>
</tr>
</thead>
<tbody>
<tr>
<td>AK Steel</td>
<td>a/BB</td>
<td>9.125</td>
<td>12/16</td>
<td>98½</td>
<td>unch</td>
<td>9.46</td>
</tr>
<tr>
<td>Allied Waste</td>
<td>b/B+</td>
<td>10.000</td>
<td>8/19</td>
<td>102</td>
<td>unch</td>
<td>9.57</td>
</tr>
<tr>
<td>Am Std</td>
<td>a/BB+</td>
<td>7.375</td>
<td>2/18</td>
<td>98½</td>
<td>–1.25</td>
<td>7.56</td>
</tr>
<tr>
<td>Chanclr</td>
<td>b/BB+</td>
<td>8.125</td>
<td>12/20</td>
<td>103</td>
<td>unch</td>
<td>7.36</td>
</tr>
<tr>
<td>Echostar</td>
<td>a/B</td>
<td>9.375</td>
<td>2/19</td>
<td>101¼</td>
<td>unch</td>
<td>9.52</td>
</tr>
</tbody>
</table>

**Bond listings** are extensive tables that contain information about recent trades of bonds, available in publications like the *Wall Street Journal*.