**Chapter 18**

**Corporate Bonds**

- Our goal in this chapter is to introduce the specialized knowledge concerning trading corporate bonds.
- Money managers who buy and sell corporate bonds possess this kind of knowledge.

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**Corporate Bond Basics, I.**

- A **Corporate bond** is a security issued by a corporation.
- It represents a promise to pay bondholders a fixed sum of money (called the bond’s **principal**, or par or face value) at a future maturity date, along with periodic payments of interest (called **coupons**).

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**Corporate Bond Basics, II.**

- Corporate bonds differ from common stock in three fundamental ways:

<table>
<thead>
<tr>
<th>Corporate Bonds</th>
<th>Common Stock</th>
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<tbody>
<tr>
<td>Represent a creditor’s claim on the corporation</td>
<td>Represents an ownership claim on the corporation</td>
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<tr>
<td>Promised cash flows (coupons and principal) are stated in advance</td>
<td>Amount and timing of dividends may change at any time</td>
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<tr>
<td>Mostly callable</td>
<td>Almost never callable</td>
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</tbody>
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**Corporate Bond Basics, III.**

- There are several trillion dollars of corporate bonds outstanding in the United States.
- More than half of these are owned by life insurance companies and pension funds.
  - These institutions can eliminate much of their financial risk via cash flow matching.
  - They can also diversify away most default risk by including a large number of different bond issues in their portfolios.

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**Types of Corporate Bonds**

- Bonds issued with a standard, relatively simple set of features are popularly called **Plain Vanilla Bonds** (or “bullet” bonds).
- **Debentures** are unsecured bonds issued by a corporation.
- **Mortgage bonds** are debt secured with a property lien.
- **Collateral trust bonds** are debt secured with financial collateral.
- **Equipment trust certificates** are shares in a trust with income from a lease contract.
A Bond Indenture is a formal written agreement between the corporation and the bondholders.

This agreement spells out, in detail, the obligations of the corporation, the rights of the corporation, and the rights of the bondholders (with respect to the bond issue.)

In practice, few bond investors read the original indenture. Instead, they might refer to an indenture summary provided in the prospectus of the bond issue.

**Bond Indentures, Cont.**

- The Trust Indenture Act of 1939 requires that any bond issue subject to regulation by the Securities and Exchange Commission (SEC) must have a trustee appointed to represent the interests of the bondholders.

  - The Act is available at the SEC website:
    - [http://www.sec.gov](http://www.sec.gov)

**Bond Indentures, Seniority Provisions**

- Different bond issues can usually be differentiated according to the seniority of their claims on the firm’s assets in case of default.
  - Senior Debentures are the bonds paid first in case of default.
  - Subordinated Debentures are paid after senior debentures.

- Bond seniority may be protected by a negative pledge clause.

- A negative pledge clause prohibits a new debt issue that would have seniority over existing bonds.

**Bond Indentures, Fixed-Price Call Provisions**

- A traditional, fixed-price call provision allows the issuer to buy back all or part of its outstanding bonds at a specified call price sometime before the bonds mature.

- When interest rates fall, bond prices increase.
  - The corporation can “call-in” the existing bonds, i.e., pay the call price.
  - The corporation can then issue new bonds with a lower coupon.
  - This process is called bond refunding.

**Bond Indentures, Make-Whole Call Provisions**

- Make-whole call provisions have recently become common

  - Like a fixed-price call provision, a make-whole call provision allows the issuer to pay off the remaining debt early. However,
    - The issuer must pay the bondholders a price equal to the present value of all remaining payments.
    - The discount rate used to calculate this present value is equal to:
      - The yield of a comparable maturity U.S. Treasury security
      - A fixed, pre-specified make-whole premium
  - As interest rates decrease:
    - the make-whole call price increases
    - But, even in the region of low yields, these bonds still exhibit the standard convex price-yield relationship in all yield regions.
Bond Indentures, Put Provisions

- A bond with a put provision can be sold back to the issuer at a pre-specified price (normally set at par value) on any of a sequence of pre-specified dates.
- Bonds with put provisions are often called extendible bonds.

Bond Indentures, Bond-to-Stock Conversion Provisions

- Convertible bonds are bonds that can be exchanged for common stock according to a pre-specified conversion ratio (i.e., the number of shares acquired).
  - Suppose the conversion ratio for a $1,000 par value bond is 20 shares.
- Conversion Price = Bond Par Value / Conversion Ratio
  - Then, the conversion price is $50 ($1,000 / 20).
- Conversion Value = Price Per Share × Conversion Ratio
  - If the market price per share of stock is currently $40, the conversion value is $800 ($40 × 20).

Tombstone Ad, Convertible Notes Issue

Tombstone Ad, Exchangeable Debenture Issue

Bond Indentures, Bond Maturity Provisions

- Bond maturity and principal payment provisions - term bonds are issued with a single maturity date, while serial bonds are issued with a regular sequence of maturity dates.
- Term bonds normally have a sinking fund, which is an account used to repay some bondholders before maturity.
  - Money paid into a sinking fund cannot only be used to pay bondholders.
  - Some bondholders are repaid before the stated maturity of their bonds, whether they wish to be repaid or not.
  - At maturity, only a portion of the original bond issue will still be outstanding.

Bond Indentures, Principal Payment Provisions

- Coupon payment provisions - An exact schedule of coupon payment dates is specified.
  - If a company suspends payment of coupon interest, the company is said to be in default, a serious matter.
    - Bondholders have the unconditional right to timely repayment.
    - Bondholders have the right to bring legal action to get paid.
    - Companies in default have the right to seek protection from inflexible bondholders in bankruptcy court.
  - If there is default, it is often in the best interests of the bondholders and the company to avoid court and negotiate a new bond issue to replace the existing one.
Protective Covenants

- A bond indenture is likely to contain a number of protective covenants.

- **Protective Covenants** are restrictions designed to protect bondholders.
  - **Negative covenant** ("thou shalt not") example - The firm cannot pay dividends to stockholders in excess of what is allowed by a formula based on the firm's earnings.
  - **Positive covenant** ("thou shalt") example - Proceeds from the sale of assets must be used either to acquire other assets of equal value or to redeem outstanding bonds.

Event Risk

- **Event risk** is the possibility that the issuing corporation will experience a significant change in its bond credit quality.

- **Example**: In October 1992, Marriott Corporation announced its intention to spin off part of the company.
  - The spinoff, called Host Marriott, would acquire most of the parent company's debt and its poorly performing real estate holdings.
  - Holding bonds in Host Marriott is more risky than holding bonds in Marriott Corporation.

Bonds Without Indentures

- A **private placement** is a new bond issue sold privately to one or more parties. That is, this new bond issue is not available to the general public.

- Private placements are exempt from registration requirements with the SEC, although they often have formal indentures.

- Debt issued without an indenture is basically a simple IOU of the corporation.

Preferred Stock

- Preferred stockholders have a claim to dividend payments that is **senior** to the claim of common stockholders.

- However, their claim is **junior (subordinate)** to the claims of bondholders and other creditors.

Preferred Stock

- Preferred stock has some of the features of both bonds and common stock.

- Typically, preferred stock issues
  - Do not grant voting rights to their holders,
  - Promise a stream of fixed dividend payments,
  - Have no specified maturity but are often callable,
  - May have their dividends suspended without setting off a bankruptcy process (as long as common stock dividends are also suspended),
  - Cumulate unpaid preferred dividends, and
  - May be convertible.

Adjustable-Rate Bonds and Preferred Stock

- Many bond, note, and preferred stock issues allow the issuer to adjust the annual coupon according to a rule or formula based on current market interest rates.

- These securities are called **adjustable-rate** or **floating-rate** securities.
Corporate Bond Credit Ratings

- A corporation usually subscribes to several bond rating agencies for a credit evaluation of a new bond issue.
- Each contracted rating agency will then provide a credit rating - an assessment of the credit quality of the bond issue based on the issuer’s financial condition.
  - The best known rating agencies in the U.S. are Moody’s Investors Services and Standard & Poor’s Corporation.
  - Rating agencies in the U.S. also include Duff and Phelps; Fitch Investors Service; and McCarthy, Crisanti, and Maffei.

Corporate Bond Credit Rating Symbols

The Importance of Corporate Bond Credit Ratings

- Only a few institutional investors have the resources and expertise necessary to evaluate correctly the credit quality of a particular bond.
- Many financial institutions have prudent investment guidelines stipulating that only securities with a certain level of investment safety may be included in their portfolios.

The Yield Spread, I.

- A bond’s credit rating helps determine its yield spread.
- The yield spread is the extra return (increased yield to maturity) that investors demand for buying a bond with a lower credit rating (and higher risk).
- Yield spreads are often quoted in basis points over Treasury notes and bonds. That is,
  - Suppose we see a 5-year Aaa/AAA yield spread equal to 51.
  - This means the YTM on this bond is 51 basis points (0.51%) greater than 5-year U.S. Treasury notes.

High Yield Bonds (“Junk” Bonds)

- High-yield bonds are bonds with a speculative credit rating.
- As a result of this poor credit rating, a yield premium must be offered on these bonds to compensate investors for higher credit risk.
- High-yield bonds are also called junk bonds.

Bond Market Trading

- An active secondary market with a substantial volume of bond trading exists, thus satisfying most of the liquidity needs of investors.
- Corporate bond trading is characteristically an OTC activity.
- Nevertheless, bond trading on the New York Stock Exchange is watched by bond investors and traders throughout the world.
At the request of the SEC, corporate bond trades are now reported through TRACE.

TRACE provides a means for bond investors to get accurate, up-to-date price information.

TRACE has dramatically improved the information available about bond trades.
- Transaction prices are now reported on more than 4,000 bonds
- That is, about 75% of market volume for investment grade bonds.
- More bonds will be added to TRACE over time.