Chapter 15: Debt financing

Some used abbreviations:

PV = present value

YTM = yield to maturity on a bond

YTC = yield to call on a callable bond

Corporate debt

Companies can raise debt using different resources. Corporate debt can be private debt or public debt. Corporate bonds are the securities that companies issue when raising debt.

Private debt is debt that is not publicly traded. Private debt is negotiated directly with a bank or a small group of investors. An example of private debt is a bank loan.

- The advantage of private debt: avoiding the costs and delay of registration with the SEC.
- The disadvantage of private debt: illiquidity, for a holder of the firm's private debt, is hard to sell it in a timely manner because private debt is not publicly traded.

Several segments of the private debt market:

- Bank loans (term loans and lines of credit)
    1. A term loan is a bank loan that lasts for a specific term.
    2. A syndicated bank loan is a single loan that is funded by a group of banks rather than just a single bank.
    3. A revolving line of credit is a credit commitment for a specific time period, typically two to three years, which a company can use as needed.
    4. An asset-backed line of credit is a type of credit commitment, where the borrower secures a line of credit by pledging an asset as collateral.
- Private placements
    1. A private placement is a bond issue that does not trade on a public market but rather is sold to a small group of investors.

Public debt is traded in a public market. In a public bond issue, a prospectus (or offering memorandum) describes the details of the offering. The prospectus for a public offering must include an indenture: a formal contract between a bond issuer and a trust company, which represents the bondholders' interests. Almost all corporate bonds pay coupons semiannually. There are also corporations who have issued zero-coupon bonds. An original issue discount (OID) bond is a coupon bond issued at a discount. Historically, bonds have been issued with a wide range of maturities.

There are four types of corporate debt, which fall into two categories:

- *Unsecured debt* is a type of corporate debt that, in the event of bankruptcy, gives bondholders a claim to only the assets of the firm that are not already pledged as collateral on other debt.

1. Notes are a type of unsecured corporate debt with maturities shorter than ten years.
2. Debentures are a type of unsecured corporate debt with maturities of ten years or longer.

- *Secured debt* is a type of corporate loan or debt security in which specific assets are pledged as a firm's collateral that bondholders have a direct claim to in the event of a bankruptcy.

3. Mortgage bonds are a type of secured corporate debt in which real property is pledged as collateral.
4. Asset-backed bonds are a type of secured corporate debt in which specific assets are pledged as collateral.

Tranches: different classes of securities that comprise a single bond issuance.

Seniority: a bondholder's priority, in the event of a default, in claiming assets not already securing other debt. Seniority is important because more than one debenture might be outstanding.

When a firm conducts a subsequent debenture issue that has lower priority than its outstanding debt, the new debt is known as a subordinated debenture. In the event of default, the assets not pledged as collateral for outstanding bonds cannot be used to pay off the holders of subordinated debentures until all more senior debt has been paid off. International bonds are classified into four categories:

1. Domestic bonds: bonds issued by a local entity, denominated in the local currency, and traded in a local market, but purchased by foreigners.
2. Foreign bonds: bonds issued by a foreign company, denominated in the local currency, in a local market and are intended for local investors. In the United States foreign bonds are known as Yankee bonds.
3. Eurobonds: international bonds that are not denominated in the local currency of the country in which they are issued. There is no connection between the location of the issuing entity and the psychical location of the market. This trading is not subjected to any specific nation's regulations.
4. Global bonds: bonds that are offered for sale in several different markets simultaneously. A combination of the domestic, foreign and Euro bonds.

The risk of holding the currency occurs when a bond makes its payment in a foreign currency. For that reason, the bond is priced off the yields in similar bonds in that currency.

Bond covenants

Covenants are restrictive clauses in a bond contract that limit the issuer from taking actions that may undercut its ability to repay the bonds. Covenants are there to protect debt holders when equity holders can take actions that benefit the equity holders at the expense of debt holders. Typical bond covenants: there are restrictions on issuing new debt, on dividends and share repurchase, on mergers and acquisitions and on asset disposition.

There is also a possibility that covenants require the maintenance of accounting measure. Limitation of the company’s (or the borrower’s) ability to increase the risk of the bond is the main goal. One might expect that equity holders would try to minimize the amount of covenants included in a bond agreement. However, this is not necessarily the case.

Although you do not expect, the equity holders do benefit from the restrictions in the covenants. The stronger the covenants in the bond contract, the less likely the firm will default on the bond, and thus the lower the interest rate investors will require to buy the bond. The costs of borrowing will reduce if a firm includes more covenants. This cost reduction may outweigh the cost of the loss of flexibility associated with covenants.

Repayment provisions

The repayment of a bond consists of the coupon payment and the principal payment. But a firm can also repay bonds in other ways: repurchasing or making tender offers.

Three main features affecting the repayment of the bond:

1. *Call provision*. By exercising a call provision, a firm can repay bonds. Callable bonds are bonds containing a call provision that allows the issuer to repurchase the bonds at a predetermined price. The call date is the date in the call provision on or after which the bond issuer had the right (not the obligation) to retire the bond. Hertz's junk bonds are examples of callable bonds. The call price is the price specified at the issuance of a bond for which the issuer can redeem the bond. It is expressed as a percentage of the bond's value. When the call price of the bond is less than the market price, the firm will call the bond. A financial manager will choose to call the bonds only when the coupon rate the investor is receiving exceeds the market interest rate. Bond prices rise when market interest rates fall. Investors pay less for callable bonds than for identical non-callable bonds, because the firm is forcing the investor to relinquish the bond at a price below the value it would have were it to remain outstanding. If a firm decides to issue callable bonds, they have to pay a higher coupon rate or accept lower proceeds. If a firm finds the option to refinance the debt in the future particularly valuable, it will choose to issue callable bonds despite their higher yield. The yield to call (YTC) is the yield of a callable bond calculated under the assumption that the bond will be called on the earliest call date. The yield to maturity of a callable bond is the interest rate the bondholder receives if the bond is not called and repaid in full. The yield to worst is quoted by bond traders as the lower of the yield to call or yield to maturity.

Bond coupons relative to market yields	Bond price is …	Likelihood of call is …	Yield to worst is …
Coupons are higher	At a premium	High	Yield to call
Coupons are lower	At a discount	Low	Yield to maturity

2. *Sinking funds*. Sinking fund: a method for repaying a bond in which a company makes regular payments into a fund administered by a trustee over the life of the bond. These payments are then used to repurchase bonds, usually at par. Using this method, a company can reduce the amount of outstanding debt without affecting the cash flows of the remaining bonds. It depends on the issue how an outstanding balance is paid off using a sinking fund. A balloon payment is a large

payment that must be made on the maturity date of a bond when the sinking fund payments are not sufficient to retire the entire bond issue. Bonds can be issued with both a sinking fund and a call provision.

3. *Convertible provisions.* Converting bonds into equity is another way to retire bonds. Convertible bonds are corporate bonds with a provision that gives the bondholder an option to convert each bond owned into a fixed number of shares of common stock. The conversion ratio is the number of shares received upon conversion of a convertible bond, usually stated per $1000 face value.

   The conversion price is the face value of a convertible bond divided by the number of shares received if the bond is converted. An example: imagine a convertible bond, face value $1000 and conversion ratio 20. If you decide to convert the bond on its maturity date, you would receive 20 shares. If you decide not to convert, you will receive $1000. By converting, you 'pay' $1000 for 20 shares. This implies a share price of $50 per share.

A straight bond is a non-callable, non-convertible bond. A straight bond is also called a plain-vanilla bond. Because the option to convert a bond into equity is valuable for a bondholder, a convertible bond is worth more than a straight bond prior to the bond maturity date. See Convertible Bond Value, figure 15.2 page 498. The current stock price determines the likelihood of eventually converting a convertible bond into equity. Conversion is likely if the stock price is high and the convertible bond's price is close to the price of converted share. Conversion is unlikely if the stock price is low and the value of the convertible bond is close to that of a straight bond.

Leveraged buyout (LBO): when a group of private investors purchases all the equity of a public corporation and finances the purchase primarily with debt. This is a way in which a public company becomes private.

There is a lower interest rate on convertible debt than on comparable non-convertible debt.