# **Chapter 2: Debt**

### Loans

Bank loans make up about 20 percent of the debt outstanding and they are expensive. There are two types of bank loans: lines of credit and loan commitments.

A line of credit is a short-term deal between a bank and a firm, whereby the bank determines the maximum loan amount, but the interest rate is not given. This means that the bank is free to ask any interest rate when the firm requests funds.

In a loan commitment, the interest rate and the maximum loan amount is compulsory. So, the bank cannot change the interest rate of the maximum loan amount. This stands for as long as the firm meets the requirements that were set when the commitment was drawn up.

Floating rates are interest rates that change over time. A benchmark rate is the floating interest rate specified in the contract. The spread depends on the default risk of the borrower. Commonly used benchmark rates are: treasury rates, fed funds rate, LIBOR, commercial paper rate and prime rate. Floating rate lending agreements of have a cap (maximum) or a floor (minimum). A collared floating-rate loan has both.

*Loan covenants* are contractual limitations imposed on the behavior of the borrowing organization. An example is a limit on dividend payouts.

#### Lease

A *lease* can be viewed as a debt tool in which the owner of an asset, the lessor, gives the right to utilize the asset to another party, the lessee, in return for prespecified payments.

Two types of leasing exist: operating lease and financial lease.

- Operating lease is usually short-term, where the lessee has the right to cancel the lease and return the asset to the lessor.
- Financial lease is a long-term agreement where the lessee has no right to return the asset. There are three types of financial lease:
  - 1- leveraged lease: the asset purchase is financed by a third party
  - 2- direct lease: same as leveraged lease only the manufacturer of the asset finances
  - 3- sale and leaseback: the asset is purchased for the lessee by the lessor

Commercial paper is a contract by which a borrower promises to pay a prespecified amount to the lender of the commercial paper at some date in the future, most of the time in one to six months. This is usually paid off by issuing new commercial paper. Issuing commercial paper is almost risk free.

## **Bonds**

Bonds are fixed-income securities which are tradable.

Nearly all debt contracts contain covenants to restrict activities that try to deprive wealth from bondholders. Equity holders deprive wealth from bondholders by making the assets more risky, adding liabilities and by paying out dividends which reduces the assets.

# Types of covenants:

- An asset covenant instructs what rights the bondholder has to the firm's assets in case of non-payment.
- An *dividend covenant* prevents managers from liquidating the firm and paying out dividend to equity holders.

Financing covenants sets the amount of additional debt that a firm can issue and the claims to assets that this additional debt has in case of default.

*Financial ratio covenants* state a minimum value for different ratios or capital. When the firm cannot meet these conditions, it is technically in default even when the company made the guaranteed payments to the bondholders.

Sinking fund covenants requires that a certain portion of the bonds to be retired before maturity.

A bonding mechanism ensures that there will be no violation of the bond indentures.

A few examples of bond options:

- *Callability*: with this option the firm has the option to retire the bonds before their maturity by paying a preset price.
- *Convertibility*: The bondholder has the option to convert the bond into anorthe security, ty[ically the common stock of the firm.
- Exchangeability: Then firm has the option to exchange the bond for another type of bond.
- Putability: offers the bondholder the right to sell the bond back to the firm. A popular type is the poison put bond, intended to look after bondholders in the event of a corporate takeover.

We can categorize bond types according to their cash flow patterns:

- Zero-coupon bond: This bond pays no interest, it only pays at maturity.
- *Straight*-coupon bond: The bond pays small equal cash flows every period. The principal is paid at maturity.
- *Perpetuity bond:* This bond lasts forever and only pays the interest.
- Annuity bond: This bond also has equal payments, but now it pays the interest plus a part of the principal payment per period.
- *Deferred*-coupon bond: The issuer has the right to pass up the interest payment obligations for a certain period.
- A premium bond is a bond with a quoted price that goes beyond the face value of the bond.
- A par bond is a bond with a quoted price that is the same as the face value of the bond.
- A discount bond is a bond with a face value that goes beyond the quoted price of the bond.

Bonds that are issued with a cut in their price are known as *original issue discount (OID)* bonds. A *dual-coupon bond* has a low coupon at first and a higher coupon in later years.

Based on the maturity of the debt instruments, the order generally is: zero-coupon, notes, bonds.

With a bond rating we rank specific debt issues. The ranking of bond depends on the financial condition of the firm. It also has an important influence on the rates of return of bonds.

It appears that bonds with a higher rank sell at a higher price than the bonds of an organization with a lower ranking.

High-yield bonds or junk bonds are below-investment-grade bonds. The market for these bonds is growing. This growth in high-yield debt issuance was linked to the increase in corporate takeovers that was taking place simultaneously. Studies concluded that the average returns for junk bonds are fairly compensated by the risk of holding the junk bond.

Asset-backed securities are securities that are pledged by cash flows from assets. An example of such assets are accounts receivable and mortgages. When small investments are packaged in a larger portfolio and securities are sold backed by the cash flows of the portfolio, we call it securitization.

#### A Eurobond has several features:

- it is sold outside the country in whose currency it is denominated
- it is a bearer bond, it is unregistered and payable to the person who carries it
- it is offered to investors in a lot of different countries
- it is normally sold only by big and well-known multinational firms
- its coupons are paid once a year

The Eurobond market has been growing, because of the growth in the currency swap market. A *currency swap* is an agreement to exchange future cash flows of bonds from time to time with payoffs in two different currencies.

Funds can be raised through a *Eurocurrency loan*. This is a major currency on deposit in a bank outside of the country of origin for the currency. They become *Eurodollar deposits*.

Lending rates in the eurocurrency market are often cheaper, because:

- banks have no reserve requirements for eurodeposits.
- · borrowers are large, well-known organizations with high-quality credit ratings.
- the lack of regulation means that banks can price loans more aggressively in the Eurocurrency market.