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# FN 281: Individual Assignment #3

**Due Date: Sat. 23 April 2016 (13:00)**

## 1. Why do corporations sell bonds?

Corporations issue bonds for several reasons:

1. Provides corporations with a way to raise capital without diluting the current shareholders' equity.
2. With bonds, corporations can often borrow at a lower interest rate than the rate available in banks. By issuing bonds directly to the investors, corporations can eliminate the banks as "middlemen" in the transactions. Without the intermediaries, the borrowing process becomes more efficient and less expensive.
3. By issuing bonds, corporations can often borrow money for a fixed rate for a longer term than it could at a bank. Most banks will not make fixed rate loans for longer than five years because they fear losing money if their cost of funds (raised by selling CDs, savings accounts, and the like) rises to a higher rate than long-term loans. Most companies want to borrow money for long terms and so elect to issue bonds.
4. The bond market offers a very efficient way to borrow capital. By issuing bonds, the borrower is spared the task of undergoing numerous separate negotiations and transactions in order to raise the capital it needs.

Instead, when corporation issues bonds, creates one master loan agreement and offers investors a chance to participate in the loan. The company offers the identical deal to all investors regardless of whether the individuals interested in buying just one bond each or corporations buying 1000 bonds. The master loan agreement between the corporation and the investors is called a *bond indenture*. The indenture contains information that we would expect in any loan agreement such as:

- The amount of money the company is borrowing.
- The interest rate the company will pay.
- The collateral for the loan (if any).
- When the company will make its interest payments.
- Whether the company will pay off the loan, that is, when the bonds will mature.
- Whether the company and/or the investors will have the choice of shortening the bond's original maturity.

## 2. What are the differences among a debenture, a mortgage bond, and a subordinated debenture?

Bonds offer some protection against the volatility and risk of stocks. Unlike stocks, investing in a bond makes us a creditor of the bond issuer, and we'll have a high ranking claim on assets if the issuer defaults on the bond's payment terms. Bonds fall under two categories: secured and unsecured. A mortgage bond is a type of secured bond; a debenture bond is also referred to as an unsecured bond.

## Characteristics of a Mortgage Bond

A mortgage bond is a type of secured bond because the bond is backed by collateral. The collateral is usually real estate or some other type of property that is subject to a mortgage. In the event of a bond default, we can foreclose and sell the property tied to the bond to collect our investment. Due to their direct claim on company assets, a mortgage bond is a safer and higher quality investment with a lower risk of default than a debenture bond.

## Example of a Mortgage Bond

An example of a mortgage bond is a commercial mortgage bond. These bonds are tied to loans for commercial property that can range from a major hotel to a mall in a small town. According to Bloomberg, commercial mortgage bond sales reached a high of $232 billion in 2007. In 2008, as the financial crisis affected lending and credit markets, sales dropped to $12.2 billion. In 2012, several investment banks are preparing offerings of commercial mortgage bonds; finalizing payment terms has been difficult due to Europe’s ongoing debt crisis, which affects bond prices and interest rates.

## Characteristics of a Debenture Bond

A debenture, or unsecured, bond is not backed by property. The bond issuer’s credit standing supports the promise that the bond’s payment terms will be met. Debenture bonds are issued when a company does not have enough assets to serve as collateral. If a company is well established and has a high credit rating, issuing debenture bonds is an easy way for them to raise funds. Debenture bonds typically carry more risk than mortgage bonds and must pay a higher interest rate to investors. If a company liquidates, debenture bondholders are paid after mortgage bondholders.

## Example of a Debenture Bond

An example of a debenture bond is the U.S. government’s Treasury bond. These bonds are guaranteed by the full faith and credit of the U.S. government and are available in a variety of maturity periods, ranging from one month to 30 years. Unlike debenture bonds issued by private businesses, this type of debenture bond is not considered high risk due to the federal government's ability to create money, if it needs to, to meet payment terms.

## Characteristics of a Debenture Bond

Subordinated debenture bonds are not backed by collateral and have a general claim after debenture bondholders have been paid. In the event of a default, owners of subordinated debenture bonds are the last bondholders in line to receive any funds. Other factors being equal, subordinated debenture bonds pay the highest return, followed by debenture bonds, followed by bonds backed by collateral.

## 3. Why would an investor purchase a convertible bond or a high-yield bond?

A convertible bond is a bond that can be converted into a pre-determined number of shares of stock. This would happen during the life of the bond. The number of shares it can be converted to is determined by the issuer of the bond, the corporation.

In terms of benefit, convertible bonds are an attractive investment. They offer the for potential market appreciation like an equity. They also offer the conservative nature and safety of a bond. A convertible bond pays we interest and gives we the option to convert it to shares of stock.

Generally, convertible bonds are issued by smaller companies who may find it costly to issue stock or bonds. Corporations in need of money will raise cash by issuing stock or issuing bonds. Companies will issue convertible bonds when stock or straight bonds are not an option. We should buy a convertible bond if we are bullish on the stock.

According to income, some investors would like to invest in stock but are reluctant to do so. In this case, a convertible bond is an attractive option. A convertible bond allows we the opportunity to collect interest, semi-annually. If the stock moves up, we can convert the bond into stock. Since we have the option to convert to stock, the income paid will be less than a traditional bond.

We can say theoretically that when a convertible bond is issued, we are told how many shares we can convert the bond into. Theoretically, if the bond is issued at $1,000 and the stock is trading at $50, our bond should be convertible into 20 shares. If the price of the stock goes to $75 we can now convert the bond into 20 shares of the stock, which will make our investment of $1,000 worth $1,500.

Last, Convertible bonds are issued by more speculative companies. They should be bought by clients who are bullish on the stock, meaning they believe the stock price will go up. Convertible bonds pay interest like traditional bonds. They offer investors the opportunity to participate in the equity market while collecting interest.

In conclusion, an investor would purchase a convertible bond because the bonds have been issued by a corporation whose shares enjoy a premium on the stock market. On conversion, he expects to earn additional income in the form of capital gains. On the other hand, an investor may buy a high yield bond because the interest rates in other high grade debts are low and he is willing to take the risks associated with the high yield bond.

## 4. Describe three reasons a corporation would sell convertible bonds.

We can say that a corporation may sell convertible bonds for the following reasons: - Its shares enjoy a good premium and thus it will be able to pay interest at a rate lower than that on normal debt instruments. - The debt does not have to be repaid and thus in cases where the company needs time to generate cash flows, this is useful. - If the company shares are popular, large resources can be raised through this route.

The biggest reason companies prefer issuing convertible bonds has very much to do with the historically low interest rates we're currently experiencing. They can achieve their goal, obtaining capital to grow their business, at super low rates. Like mentioned earlier, convertible bonds have lower yields than traditional corporate bonds. So they get to take the currently low interest rates and lower them even more by issuing convertible debt. Another advantage of selling convertible bonds is that the amount issued does not show up on the company's balance sheet as a debt. Interest payments, unlike dividend payments, are federally tax deductible.

Briefly, the corporation gains three advantages by issuing convertible bonds. First, the interest rate on a convertible bond is often lower than that on traditional bonds. Second, the conversion feature attracts investors who are interested in the speculative gain that conversion to common stock may provide. Third, if the bondholder converts to common stock, the corporation no longer has to redeem the bond at maturity.

## 5. Explain the methods that corporations can use to repay a bond issue.

In short, a corporation can repay a bond issue through the following routes: - Out of internally generated funds - Out of funds that have been invested in outside securities with the specific purpose of using them to repay bonds (Sinking Fund) - Out of the proceeds of a new loan issued to fund the repayment.