# Investment Basics: 5 basic things to know about Bonds

Are you a prudent investor? If you are, then you are likely to practice good asset allocation. This means that you have created and developed an investment portfolio that is diversified and well balanced, such that your funds are allocated across various asset classes. The theory is that you can possibly lessen risks in your portfolio because each asset class has a different correlation to the others.

In this and forthcoming issues of Fund Focus, we introduce you to some of the key asset classes that you may want to consider when constructing your portfolio. We kick-off with understanding and investing in bonds. We will cover the fundamentals of bonds, the different types of bonds, their characteristics and risks.

#### 1. What is a bond?

Just as individuals borrow money to fund their spending, companies also do the same. In this connection, a bond is simply a type of loan taken by companies or by a sovereign entity. When an investor buys bonds issued by a company, he lends money to the company. In exchange, the company pays an interest known as a "coupon" at predetermined intervals and returns the principal on the maturity date.

This differs from buying a stock, where dividend payment is not guaranteed and neither is the payment frequency determined at the onset. Also, bond characteristics can vary significantly depending on the loan maturity, the coupon payment and some other embedded features included in the issue. Therefore, this asset class can be said to be more complex compared with equities.

## 2. Important characteristics of a plain vanilla bond

In any bond issue, there are a number of key features that one should not miss out. The first is the principal or face value of the paper. Essentially this is the amount that will be returned to the bondholder upon the expiry of the issue.

This is also the principal value on which the coupon payment is calculated. So if the bond pays 3.7% annual coupon rate on a \$1,000 bond paper, this works out to \$37 in coupon payment every year.

The other important feature to note is the time to maturity. This determines the time horizon needed for you to recover the principal unless you sell the paper prior to maturity. A longer investment horizon means that investors will wait for a longer period of time before recovering the principal sum. Therefore, a longer time to maturity typically results in higher interest rate.

Perhaps a more important concept is the yield to maturity. The yield to maturity is the discount rate used to equate the present value of a bond's cash flow stream with its current price. It is also the interest rate that investors should be looking at, and not the coupon rate, since the principal value is often not the price at which an investor pays for the bond from the secondary market. A bond that carries a higher yield to maturity will, other things being equal, yield higher returns than one that has lower yield to maturity, if the paper is held to maturity.

And because the coupon payments are fixed at a constant rate, a higher yield to maturity will, other things being equal, result in a lower bond price. For this reason, the two variables vary inversely with each other.

### 3. Different types of bonds

As mentioned earlier, a bond is a loan taken out by an entity, and this entity can be either a company or the government of a country. As government debt is, in a way, backed by the reserves of a country, a distinction has to be made between sovereign and corporate bonds.

Concerning a sovereign issuer, an investor needs to look at the country's economic health, and more importantly, its external and fiscal balances. A country that is running on huge current account deficits is likely to lose its economic competitiveness unless it is in the early stage of industrialization. A government that incurs huge budget deficit may be spending beyond its means and both deficits will affect the country's ability to meet its debt obligations. Conversely, a country with healthy external and fiscal balances is generally deemed to be in a strong position to meet its debt obligations. This makes the risk of default significantly lower.

In the case of corporate issues, investors need to examine the industry prospects and the company's business fundamentals. If industry prospects are bright and the company is competitive, with strong cash flow position, this will raise the credit worthiness of the borrower and the bond's value. The converse is also true.

Overall, the bond's value depends largely on the credit strength of the borrower, but the factors to look at are different, depending on whether the borrower is a sovereign entity or a corporation.

At a geographical level, one can also look at bonds in terms of its country of origin. Traditionally, corporate bonds that originated from emerging markets such as Indonesia and Thailand have been deemed to be more risky than that from developed markets. This is because these companies are often less transparent in their corporate disclosures, while corporate laws are less clear.

However, that has changed in the last few years, as many of these emerging markets posted strong economic growth and improved their corporate governance structure. For this reason, there is a growing recognition that these bonds may be of a higher quality than some issues from developed markets.

## 4. Exotic structures – callable and convertible options

In some cases, the borrower may wish to have the option of repaying the debt at a particular price. For this reason, some bond issues come with callable features – the choice of recalling the debt at a fixed price at certain predetermined intervals. Such bonds expose investors to the risk that the stream of cash flow generated from the bond may be withdrawn, when debts are repaid. This makes the bond less valuable than a plain vanilla bond, other things being equal.

There are also cases where the bond grants the investors the flexibility to convert their debt holdings into a company's equity. Some investors find such a feature attractive, especially if they see upside in the company's share price. And if not, the investor can at least enjoy the stream of cash flow generated from the investment. For this reason, such bonds are typically more valuable than a vanilla bond with otherwise identical structure.

### 5. Risks of holding bonds

As with all debts, bonds have credit or default risk. This is basically the risk that interest and principal payments due on the obligations are not met. For example, the recent spike in yields on Greece's sovereign debts occurred precisely because the credit risks have heightened. As a result, investors demand a higher yield in order to hold the sovereign paper.

Another common risk in holding bonds is the interest rate risk. This is the risk that interest rates will change significantly from what the investor expected. If interest rates significantly decline, the investor faces the possibility of prepayment. If interest rates increase, the investor will be stuck with an instrument yielding below market rates. The greater the time to maturity, the greater the interest rate risk an investor bears, because it is harder to predict market developments further out into the future.

As mentioned earlier, companies can sometimes recall the loan ahead of maturity if rates move in their favor. The possibility that bond issue will be paid off earlier through a call provision is called prepayment risk. This can be bad news for investors, because the company only has an incentive to repay the obligation early when interest rates have declined substantially. Instead of continuing to hold a high interest investment, investors are left to reinvest funds in a lower interest rate environment.