



Back to Basics Series: Bonds (part 2 of 2)

THE FIRST SECTION of this article published in the previous issue provided an overview of the importance and rationale for companies to issue bonds, and defined marketable debt and credit ratings. This concluding section will discuss how bonds are traded and how changes in interest rates affect their price.

Bonds are traded on an over-the-counter or unlisted market as opposed to most stocks that are typically traded on an exchange or listed market such as the Toronto Stock Exchange. The difference is that bonds are bought from or sold to a dealer rather than trading them directly with another investor as is typically done with stocks. Because bonds are traded from a dealer's inventory, each dealer has a unique selection of bonds available at any one time. Prices between dealers for the same bond can vary depending on how motivated the dealer is to acquire or sell a particular issue. Most institutional money managers shop around when trading in bonds because price discrepancies can be significant.

The trade price for a bond has a built in commission for the dealer and therefore trade confirmation slips do not show a commission line item. This makes it difficult for retail investors to know how much commission they have paid for a bond transaction and whether they are getting a fair price.

Bonds are traded in increments of \$1,000 face or par value with most brokers having a minimum trade size of \$5,000. Bonds are priced as a percentage of \$100 par value. For example, a bond priced at 98.00 means that the price is \$98.00 per \$100 of par value. The bondholder receives the par value at maturity (assuming no default). It is important to include the capital gain or loss between the purchase price and the par value that will be received at maturity when calculating the rate of return on a bond investment. For example, a bond that was purchased at 102 with a coupon of 6%, will have a yield to maturity of less than 6% because there is a \$2 per \$100 par difference between what was paid at the time of purchase and what will be received at maturity. The easiest way to find the yield to maturity is to simply ask your investment advisor.

The price of a bond in the secondary market is affected by several factors, one of which is changes in interest rates. The relationship between interest rates and bond prices is inverse, like a teeter-totter. When interest rates increase (decrease), bond prices decrease (increase). This is because when you buy a bond, you are effectively locking in a rate of return if you hold the bond until maturity (assuming no default). If interest rates increase, then a prospective purchaser of your bond will want to receive the going interest rate.

For example, let's say that a bond is bought at 100 with a yield to maturity of 5%. If interest rates go up to 5.5%, then a prospective purchaser of the bond will want to receive 5.5%.

The only way the purchaser will get this rate is if they pay less than 100 for the bond. Thus the quoted market value of the bond will decrease.

The impact of interest rate changes on a bond is also determined by time to maturity and coupon rate. When interest rates change, and assuming all other terms of each bond are the same, then:

- longer term bonds will move more in price than shorter term bonds
- lower coupon bonds will move more in price than higher coupon bonds

Although the quoted market value may rise or fall during ownership, a bond that is held until maturity will pay back its face value at maturity. Therefore, the rate of return for a bond that is held until maturity is determined by the purchase price. The underlying assumption is that the borrower does not default on its obligations.

There can be various features and provisions built into bonds that may make the bonds more or less attractive to a purchaser. These characteristics include being callable, convertible, extendible and retractable.

Bonds are an important component of our economic system and as an asset class have a place in most portfolios. Understanding their unique risk and return characteristics is essential in structuring a suitable bond portfolio. 💰