Bond Basics

Fixed income securities, commonly called "bonds", represent the debt of the issuer. Bonds are issued by the United States government, various governmental agencies, municipalities, and corporations. Bonds differ from stocks, which represent ownership. A bond is, in effect, a loan (US government bonds are loans to the US government and the "national debt" consists of outstanding government bonds).

A bond is a promise to repay a certain amount at a time in the future. This time period is the Bond's "Maturity". Until Maturity the purchaser of a Bond receives interest at a fixed rate. This rate is called the "coupon rate". Note that the interest amount does not change, but the bond's value or its price does go up or down. Accordingly, there are investment risks in bonds, just like in stocks.

Economic conditions affect the value of bond investments. Interest rates and inflation are two major economic factors that directly affect the worth and future of a bond. Changing interest rates represent a significant risk. If you own a bond that was issued before an interest rate increase, you may lose money if you sell the bond before maturity, since its price will probably be lower than par value. As interest rates fluctuate, the bonds you hold can become less attractive, as investors and traders seek other bonds that pay higher interest rates. Further, when interest rates are low, many investors put their money into stocks to get a higher return. Lack of interest in bonds can depress bond prices.

The other economic risk bondholders face is rising inflation. The risk of holding a bond to maturity is that rising inflation could erode the buying power of the interest payments as well as the value of the principal. The dollar amount or "face value" of the bond does not change, but the purchasing power of those dollars decreases at a predictable rate (with some exceptions, see 'Inflation Protected Bonds" below). The longer you hold a fixed-income investment, the more likely it is that inflation will erode its value. The bond issuer may find itself in financial trouble. This risk, occurring most often with corporate bonds, can seriously diminish your return, or make it disappear completely.

Current Yield

Current Yield is the interest paid by a company expressed as a percentage of the purchase price. For example, a $1000 Bond paying $40 interest annually, and currently selling for $1050 will have a yield to maturity of 3.8% ($40 divided by $1050). The current yield of this bond is 4% ($40 divided by $1000 If the bond is selling at a discount it will have a yield to maturity greater than the current yield).

If you buy a 10-year $1,000 bond paying 6% and hold it until it matures, you'll earn $60 a year for ten years — an annual yield of 6%, which is the same as the interest rate. But if you buy in the secondary market, after the date of issue, the bond's yield may not be the same as its interest rate. That's because the price you pay affects the yield. For example, if a bond's current yield is 5%, it means your interest payments will be 5% of what you pay for the bond today — or 5% back on your investment annually. You can use the yield to compare the relative value of bonds. Return, on the other hand, is what you make on the investment when the par value of the bond, your profit or loss from trading it, and the yield, are computed. There's an even more precise measure of a bond's current value called the yield to maturity. It takes into account:

- The interest rate in relation to the price
- The purchase price in relation to the par value
- The years remaining until the bond matures

Yield to Maturity

Yield to maturity is a way to predict return over time, but it is calculated by a complicated formula — and it isn't often stated in newspaper bond tables. Brokers have access to the information, and it’s available on websites that specialize in bond information or bond trading.

Bond Risks

A bond is a loan, repaid with interest. In some cases, such as with Treasury Bonds, this interest may be figured into the face value of the bond, or it may be added on top of the face value according to the principles of compounding as described above. Some bonds make payments on this interest over time, while others repay interest and principal at maturity or call.

Since value includes interest, changes in interest *rates* will produce similar changes in the total value of a bond. This is **Interest Rate Risk**. Interest rate risk is higher the longer the period of maturity, or the lower the coupon rate**.** As prices of Bonds go UP, yields go DOWN.

Interest rate risk is influenced by three main factors:

- **Holding Period**

  The longer the holding period of a bond is, the greater the interest rate risk. Likewise, the shorter the holding period, the lesser the expected impact of changes on interest rates is.

- **Maturity**

  The longer the period of maturity for a bond is, the greater the interest rate risk. Bonds with shorter period of maturity are expected to be less subject to changes in value due to changes in interest rates.

- **Size And Timing Of Payment**

  The lower the coupon rate of a bond is, the greater the interest rate risk; more frequent payments decrease interest rate risk. Generally the higher the yield, the longer the maturity.

These factors indicate a definite (and frequently negatively correlated) relationship between interest rate, coupon rate, maturity, and bond value.

- As coupon rate decreases, interest rate increases.
- As maturity increases, interest rate risk also increases.
- Long-term zero coupon bonds have less value than short-term bonds.
- Current bond value is always higher with lower interest rates.

Downgrading

One additional danger bondholders face—and one than cannot be effectively anticipated—is that a rating service may downgrade its rating of a company or municipal government during the life of a bond, creating a fallen angel. That happens if the issuer's financial condition deteriorates, or if the rating service feels a business decision might have poor results. If downgrading occurs, investors instantly demand a higher yield for the existing bonds. That means the price of the bond falls in the secondary market. It also means that if the issuer wants to float new bonds, the bonds will have to be offered at a higher interest rate to attract buyers. The greatest risk the investor faces is default, which occurs when the issuer doesn't live up to its promise to pay. Issuers who default on their loans can default on interest — which means you receive your principal but the interest is not paid. An issuer can also default on repayment, which means you receive some of your interest but lose your principal. Bankruptcy typically results in total default, making your client's bonds worthless. Thoroughly researching bonds can help you protect your clients from some risk, but sometimes even the best-looking investments can, in time, turn out to be troublesome.