STIFEL INVESTING

# Understanding the Bond Market

As markets become volatile, many investors turn to bonds as an alternative to stocks. While bonds can play an integral role in a well-diversified portfolio, investors should fully understand their characteristics before investing. Bonds are often deemed a "safe" investment. However, investors need to be aware that bonds, like all investments, do carry some risk, and those risks need to be considered carefully.

## Bond Fundamentals

If you are considering purchasing, or have already purchased, bonds for your portfolio, you should understand that not all bonds are created equal. While they are all considered debt instruments, bonds are created by different entities for very different purposes and carry varying risks and tax-related liabilities. Simply put, bonds are issued by companies and government bodies to fund their day-to-day operations or to finance specific projects. When an investor buys a bond, he or she is, in fact, loaning money for a certain period of time to the issuer of the bond. In return for loaning funds, investors receive the principal amount back, with interest, at the time the bond comes due or "matures."

A bond's face value, or the price at issue, is known as its "par value," and the interest payment is known as its "coupon." The price of bonds will fluctuate, similar to stocks, throughout the trading day. However, with most bonds, the coupon payment will stay the same (some floating-rate securities do exist). If an investor purchases a bond in the secondary market at the face value, the bond is considered to be sold at "par." If a bond's price is above its face value, it is sold at a premium. If a bond's price is below face value, it is sold at a discount.

In general, there are three main categories that bonds will fall under: Government, Municipal, and Corporate.

## Government Bonds

For bond investors looking for low risk investments, U.S. Treasuries are typically the best bet, as they are backed by the full faith and credit of the U.S. government. The U.S. Treasury regularly offers three types of securities: Treasury bills, notes, and bonds. Treasury bills (or T-bills) are short-term securities that mature in one year or less from their issue date and are purchased for a price less than their face value. Treasury notes and bonds are securities that pay a fixed rate of interest every six months until the security matures. Treasury notes mature in more than a year, but not more than ten years from their issue date. Bonds, on the other hand, mature in more than ten years from their issue date. Bonds and notes can usually be purchased for a price close to their face value. Interest from Treasury securities is exempt from state and local income taxes, which make them particularly beneficial if you live in a state with a high tax rate.

In addition to U.S. Treasuries, certain federal government agencies or government-sponsored enterprises (GSEs) have been authorized by Congress to issue debt securities to certain groups of borrowers, such as homeowners, farmers, and students. In general, debt securities issued by GSEs are considered to have high credit quality. However, it is important to recognize that issuers in the U.S. Agency market are corporations and that their bonds are not explicitly guaranteed by the U.S. Government.

## Municipal Bonds

Just as the federal government needs funds to operate, local governments and public entities, such as school districts, often issue municipal bonds to meet their financial needs. Municipal bonds can be issued by states, cities, towns, or public commissions to provide money for schools, hospitals, and other public works. These securities provide income that is free of federal and, in some cases, state and local taxes. (Although income generated by most municipal bonds is exempt from taxes, any capital gains earned from the sale of bonds are subject to all federal and most state tax laws and certain bonds may be subject to the alternative minimum tax.)

## Corporate Bonds

Corporate bonds, unlike U.S. Treasuries and municipal bonds, are fully taxable and may carry greater risk. At the same time, they may offer higher returns than tax-advantaged bonds. Corporate bonds are issued by corporations in the need of capital and are typically issued in denominations of $1,000 with terms of 1 to 30 years. Unlike stocks, bonds do not give the holder ownership interest in the corporation, as they are simply a tool used to lend the corporation funds they need to meet their goals.

Because corporate bonds generally carry greater risks than government and municipal bonds, it is critical that investors understand the quality of the bond they are considering for investment. To evaluate the credit quality of a bond, investors can look to organizations that rate various corporate bonds, such as Moody's Investors Service and Standard & Poor's. Those bonds rated Baa or above by Moody's and BBB or above by Standard & Poor's are considered investment-grade. Bonds rated below investment grade are considered more speculative and carry greater risk.

## Understanding Yields

As previously mentioned, the coupon rate is the interest rate paid on a bond. This amount is expressed as a percent of par value (normally $1,000). For example, a 4% coupon would indicate that the annual interest paid on the bond is $40. The current yield rate indicates the current rate of return an investor will receive on each dollar invested, without any adjustments for differences between the purchase price and

| Credit Risk | Moody's | Standard & Poor's |
|---|---|---|
| *Investment Grade* | | |
| Highest Quality | Aaa | AAA |
| High Quality (very strong) | Aa | AA |
| Upper Medium Grade | A | A |
| Medium Grade | Baa | BBB |
| *Non Investment-Grade* | | |
| Somewhat Speculative | Ba | BB |
| Highly Speculative | Caa | CCC |
| Most Speculative | Ca | CC |
| Imminent Default | C | C |
| Default | C | D |

the maturity value. The current yield rate is useful when comparing current yields on various income investments. The yield to maturity rate indicates the overall rate an investor will earn, including adjustments for any differences between the purchase price and the $1,000 maturity value.

The yield to call rate indicates the overall rate an investor will earn, including adjustments for any differences between the purchase price and the call price, in the event the bonds are called by the issuer. It is important that investors make note of the yield to maturity and yield to call on any bonds they are considering purchasing.

### Laddering

Investors can never be completely certain as to where yields on bonds are headed. A popular way for investors to help balance risk and return in a bond portfolio is to utilize a technique called laddering. To build a laddered portfolio, investors purchase a collection of bonds with different maturities spread out over their investment time frame. By staggering maturities, investors may be able to reduce the impact that changes in interest rates can have on their portfolio.

For example, an individual who wishes to create a laddered portfolio could purchase bonds that mature each year during a span of ten years. By using a rollover strategy as well, when the first bond matures, the investor could reinvest those funds in a bond that matures in ten years. As each bond matures, the investor would continue this process. After ten years, the investor would own all ten-year bonds, with one maturing every year. By laddering the bond portfolio, an investor can worry less about fluctuations in interest rates. If interest rates rise, he or she will soon have money available, from a maturing bond, to take advantage of a new bond. If interest rates should fall, then the investor has at least managed to secure higher rates for a portion of the portfolio. This strategy can also be used with certificates of deposit (CDs).

### The Effect of Taxes

Many investors find municipal bonds attractive because of their tax advantages. However, it is important for investors to compare the tax-advantaged bonds to taxable investments in order to determine the best investment for their situation.

In order to compare rates of return on investments, it is helpful to adjust the tax-free rates to their "taxable equivalent" rates. This is the taxable rate that would have to be earned in order to net the same tax-free rate, after paying federal income taxes. To calculate the taxable equivalent rate, simply divide the tax-free rate by one minus your federal tax bracket rate. For example: Assuming an investor's federal marginal tax bracket is 28% and an investment offers a tax-free rate of 4%, the taxable equivalent rate would be 5.56% (4% /1-.28 = 5.56%).

Based on this calculation, the investor would have to earn 5.56% on an investment that was subject to federal income taxes to net the same 4% that the tax-free investment offered.

### Knowing the Risks

While the income generated by bonds is generally "fixed," the same is not true for a bond's return. There are many risks that may affect a bond's return. These risks include:

*Inflation risk* — Due to the fact that most bond interest payments are fixed, their value can be depleted by inflation. Therefore, the longer the term of the bond, the greater the inflation risk.

*Interest rate risk* — The prices of bonds move in the opposite direction of interest rates. When interest rates rise, prices of outstanding bonds fall. This is because newer bonds will be issued paying higher coupons, making the older, lower-yielding bonds less attractive. On the other hand, when interest rates fall, prices of outstanding bonds will rise.

*Duration risk* — Duration is a measure of a bond price's interest rate sensitivity. This calculation is the approximate percentage change in the price of a bond or bond portfolio due to a 100 basis point change in yields. For example, a bond with duration of five indicates that it's subject to a price change of 500 basis points for each 100 basis point change in yields. Bonds with higher duration carry more risk and have higher price volatility than bonds with lower duration.

*Call risk* — Many corporate and municipal bond issuers have the right to redeem or "call" their bonds before they have matured. When the bond is redeemed, the issuer is required to pay the bond holder the par value of the bond only, which means the bond holder may get less than the market price of the bond, but will also have to reinvest his or her funds at prevailing rates.

*Credit risk* — Because a bond is a debt instrument, there is a risk that the bond issuer will be unable to make its payments on time, or at all. If a company enters bankruptcy, bondholders will receive any money due before stockholders receive their portion. However, depending on the situation, there are no guarantees the bondholder's investment will be returned at all.

*Liquidity risk* — Bonds, in general, do not offer the liquidity that stocks provide. When purchasing a bond, investors need to remember that they generally should be considered a longer-term investment.

*Market risk* — Because the rate on most bonds is fixed, the market value of these investments will fluctuate over time, reflecting current changes in interest rates. Bonds follow the laws of supply and demand. The more popular or less plentiful a bond, the higher the price it can command in the market.

### Diversify With Bonds

Bonds can be important part of an asset allocation mix and can be useful in diversifying your portfolio. However, diversification does not ensure a profit or protect against loss in declining markets. Determining how much of your portfolio should be allocated to bond investments will be based upon your long-term financial goals and objectives, your tolerance for risk, investment time horizon, and ability to invest. To learn whether investing in bonds is right for you, contact us today.