

Master Class: Bond Yields

By Jeremy Jenkins, CFA

The word “set” has more meanings than any other word in the English language, its entry in the dictionary totaling a record 60,000 words.¹ In the investment world, the word “yield” could give “set” a run for its money.

Fixed-income market participants often quote the term “yield,” but the word’s context could be misunderstood because various types of yield exist and each is calculated differently. If an investor purchases a bond paying a 5 percent coupon, that bond doesn’t necessarily have a 5 percent yield. The bond’s yield is a more-robust figure, and may factor in the price of the bond, the number of coupon payments or the callability options, depending on the type of yield.

In this post, we explain the pros and cons behind different types of yields and unpack how some yield metrics are better suited to certain bond markets. Because the “search for yield” remains one of the most salient trends in today’s bond markets, investors can benefit from knowing the differences between various types of yields.

CURRENT YIELD

One of the simplest yield metrics is the current yield. This is calculated as the annual coupon interest divided by the market price. For example, a bond purchased at par, or \$100, with a 5 percent coupon would have a 5 percent current yield. However, if that same 5 percent coupon bond was purchased at a discount, say \$95, the current yield would be 5 percent divided by \$95, or 5.26 percent. If the bond was purchased at a premium of, \$105, the current yield would be 5 percent divided by \$105, or, 4.76 percent.

This measure is often used due to its simplicity and easy calculation. The main problem with this measure is that it is solely based on coupon and does not take into account the amortization or accretion of a bond. Current yield also does not account for the reinvestment of interest or the time value of money.

YIELD TO MATURITY

A meatier metric for yield is the yield to maturity (YTM). The YTM is the discount rate that equates the present value of the bond’s future cash flows (received at coupon and maturity) to the market price of the bond. YTM allows the investor to better compare the present value of the bond’s future payments to future cash flows for various investment options. Unlike current yield, it accounts for the time value of money and assumes that the interest payments are reinvested at that YTM. Also, this metric takes into account the amortization of the premium or the accretion of the discount on the bond. For those reasons, YTM is a better barometer for yield than the current yield.

Two problems with YTM, however, are that it assumes the coupon payments are reinvested at the YTM when in practice the reinvestment rate is often different, and YTM ignores the impact of prepayment options like call options, sinking funds or put options embedded in the bond structure.

YIELD TO CALL

Next, yield to call (YTC) takes into account the callability of bonds. The call features on a bond can be pivotal to the return an investor receives on an investment, and call options are particularly prominent in municipal bonds.

Some bonds are callable, and therefore investors cannot assume the bond will remain outstanding until maturity. YTC is calculated assuming that the bond is called on its first call date. This metric is similar to YTM, but it takes into account the bond’s embedded optionality.

In the municipal bond market there are frequently bonds with 10-year par call options for the issuer. However, bonds may or may not be called before maturity. Therefore, one of the cons of YTC is that it assumes issuers will call at the first call date, which isn’t always the case.

YIELD TO WORST

For a conservative measure of yield, investors can look at the lowest yield possible for every call date, put date and final maturity date scenario (some municipal bonds have more than one call date). This metric is known as the yield to worst (YTW). YTW is generally the most conservative rate of return of the various possible outcomes. At Breckinridge, we typically use the YTW as our favored metric.

MARKET/BOOK YIELD

As a further iteration of yield, we can differentiate between market yield and book yield. So far, we have spoken about yields based on where bonds are trading at a particular point in time. This is the market yield, and includes market YTC, market YTW and so on. We can also look at yields based on where the bonds were actually purchased, or the book yield. For tax free municipals bonds, the book yield is the tax free yield for tax reporting purposes. Investors can calculate the book YTM, the book YTC, etc., to discover the book YTW based on the price where the bond was bought.

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#308757 (9/30/22)

FOOTNOTES:

1. Guinness World Records, as of July 2019.

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By contrast, the market yield reflects that rate of return based on current market prices, and is more volatile.

The book yield and market yield are both relevant measures.

For bonds held for a longer time, the book yield can be useful to determine embedded gains (or losses) if interest rates have declined (or increased) since the purchase. Awareness of both measures can be especially useful when assessing tax ramifications from potential bond sales. Any specific securities mentioned are for illustrative and example only. They do not necessarily represent actual investments in any client portfolio.

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