RBC Global Asset Management

Bond basics: A primer

Investing in bonds or bond funds can often involve a lot of investment jargon. In this primer, we look to make bond investing simpler by breaking down the key aspects of this important asset class.

What is a bond?

You can think of bonds as loans. A government or corporation often looks for funding to launch a new project or expand their operations. One way they can raise the money is by issuing a bond. A bond is an agreement to borrow from investors for a set time period and then repay the amount. In return, investors receive interest payments.

What risks do I face when investing in bonds?

Like any investment, bonds carry some amount of risk. The higher the risk associated with an investment, the higher return investors will expect to earn. There are two main risk bond investors should keep in mind:

1. Interest rate risk: The vulnerability of a bond to changes in interest rates. Usually, the longer a bond is from maturity, the greater interest rate risk it has because there is more uncertainty over the path of rates over time.
2. Credit risk: The risk that the issuer may default and not pay the principal and interest.

Bonds issued by governments often pay a lower rate of interest than corporate bonds. This is because governments in general have the highest likelihood of repaying investors. For the purposes of this primer, we will focus on government bonds and the factors that influence them.

How does a bond work?

You, the investor, can expect to receive two types of payments from a bond issuer:

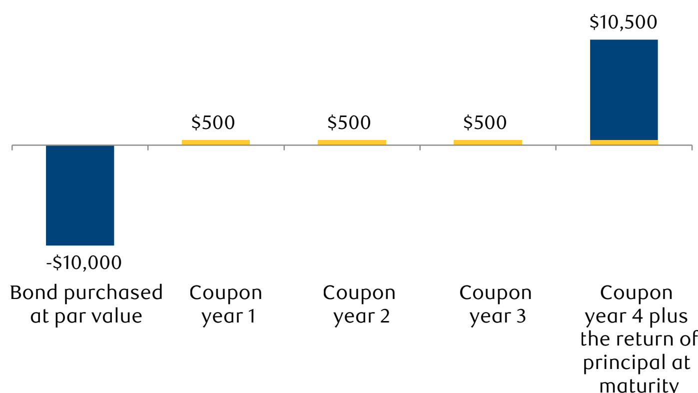
1. Interest payments over the life of the bond (also called coupon payments).
2. The face value of the bond when it matures. This is the return of your principal (the money you originally loaned the issuer).

SOME TERMS YOU NEED TO KNOW

- *Face value/Par value:* The amount of the original loan.
- *Coupon:* The interest rate that applies to the loan.
- Term: The length of time the loan lasts. The term can be anywhere from a year or less to as long as 30 years.
- *Maturity date:* The date the bond becomes due and the issuer must repay the loan.
- *Current Yield:* A simple measure that calculates the annual income generated by a bond as a percentage of its current market price. It can be useful for investors with a shorter time horizon. However, it does not consider factors such as time to maturity and potential price changes.
- *Yield-to-maturity:* A more comprehensive measure that estimates the total return an investor can expect to earn if a bond is held until its maturity date. It considers both the bond's periodic coupon payments and any capital gains or losses upon maturity. For the purposes of this article, we focus on yield-to-maturity as it provides a more complete picture of a bond's return potential.
- *Duration:* A way to measure how sensitive bonds are to changes in interest rates. It is expressed as a number of years because it's a calculation of how long it will take the investor to be paid back on their loan in full. The further away a bond is from its maturity date, the longer its duration usually is – meaning it is more exposed to changing interest rates.

Let's say you bought a four-year bond at its face value of $10,000, and it has a 5% coupon paid once a year. If you hold the bond to maturity, your total return will equal the coupon payments you received over the life of the bond. In other words, your return on that bond will equal its coupon rate of 5%.

Cash flow of a four-year bond with a 5% annual coupon



What might I earn on my bond investment?

A bond's yield-to-maturity is an estimate of the total return you'll receive on that bond if you hold it until it matures. The yield is expressed as an annualized rate, such as 5%. This estimate is mostly based on two things:

1. The coupons you collect from the bond issuer.
2. Any difference between the price you paid for the bond and its par value that will be repaid at maturity.

Provided you hold the bond to the maturity date and reinvest the coupons at the same rate of interest, the yield will be your annual rate of return for that investment. All else being equal, the longer the time to maturity, or the more risk of the issuer being unable to repay the loan, the greater the yield would typically be.

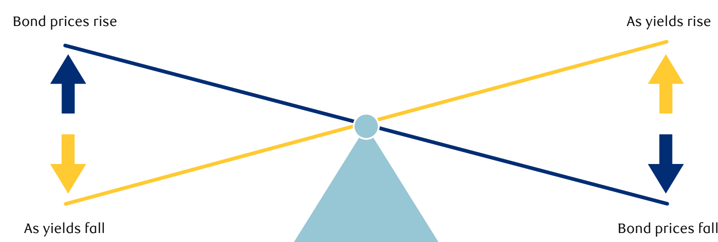
However, if you decide to sell your bond in the market prior to its maturity date, you may have a gain or loss based on whether the bond was worth more or less than what you paid for it.

Why do bond prices change?

A bond's price is related to its yield. Remember that a bond's yield is a reflection of the current market rate for bonds: how much return investors demand for lending money to an issuer for a specified period of time. Several things influence the yield bond investors demand, including macroeconomic factors like the level of interest rates. For example, when inflation began to rise in 2022 and central banks increased policy interest rates, bond yields also rose.

Because a bond's coupon payments are fixed, changes in the bond's yield are reflected by movements in the bond's price. In our earlier example, we discussed a bond with a 5% coupon and yield. If the prevailing yield for similar bonds rose to 6%, newly issued bonds might offer a 6% coupon. To remain competitive and attractive to investors, the price of the bond paying a 5% coupon would have to decline to the point that its yield rises to 6%.

Bond prices and interest rates generally move in opposite directions



The sensitivity of a bond's price to changing yields is measured by its duration. Duration is expressed in years and it is the expected payback period on the bond. For example, our earlier four-year bond with a 5% coupon would have a duration of 3.5 years. This means that the investor can expect to recoup their initial investment after a period of 3.5 years. With a duration of 3.5, the bond's price should fall 3.5% for every one-percent rise in yields, and vice versa. The further away a bond is from its maturity date, the longer its duration typically is – meaning a greater sensitivity to changing yields.

Will I lose money on the bonds I already hold if interest rates rise and bond prices fall?

Not necessarily, as long as you hold them to maturity. Your bonds are still expected to keep paying the same coupon rate as when you bought them. The issuer is also expected to pay back the full amount they borrowed from you at maturity.

Continuing with our earlier example, what's changed is that those 5% coupon payments simply don't look as attractive compared to new higher-yielding bonds. That means the price at which you could sell your bond before it matures will fall.

Of course, it can be unsettling to see bond prices fall over the short term as interest rates rise. But it can work out for the better over the long term. This is because you can reinvest your coupon payments from your older bonds at those new higher yields. This can lead to higher overall fixed income returns.

What is the difference between a bond and a guaranteed investment certificate (GIC)?

Bonds and GICs are a lot alike. Both are forms of loans to an issuer for a set period of time. A key difference is the ability investors have to sell their investment before maturity.

	Bonds	GICs
Regular interest income	√	√
Fully repay the amount you invested at maturity	Defaults are rare. Governments are generally less likely to default than corporations.	√
Allow you to sell or redeem before maturity	√	In some cases
Penalty/loss if you sell or redeem before maturity	If interest rates rise, the price of your bond will fall and you will sell at a loss, But you might also profit on selling your bonds early. If yields have fallen since you purchased them.	Often you will receive reduced interest payments if you redeem early.

Because GICs aren't tradeable, you don't usually see their value change in your account. But that doesn't mean their value to you as an investor doesn't change with shifting interest rates. If GICs did trade, their price would move much in the same way as bonds.

Why is it important to consider bonds as part of your portfolio?

Bonds provide a predictable source of income. They can also help to balance risk and protect your portfolio when stock markets are moving downwards. That's because bond prices tend to move in the opposite direction of equities.

Ultimately, holding bonds in your portfolio helps you diversify and that can mean smoother returns than investing only in equities.

For more investment insights, please visit www.rbcgam.com or talk to your financial advisor.

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