PIMCO

INVESTOR EDUCATION

Introduction to Bonds

Learn about how bonds work, the relationship between interest rates and bond prices and the important role bonds play in portfolios.

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What is a Bond?

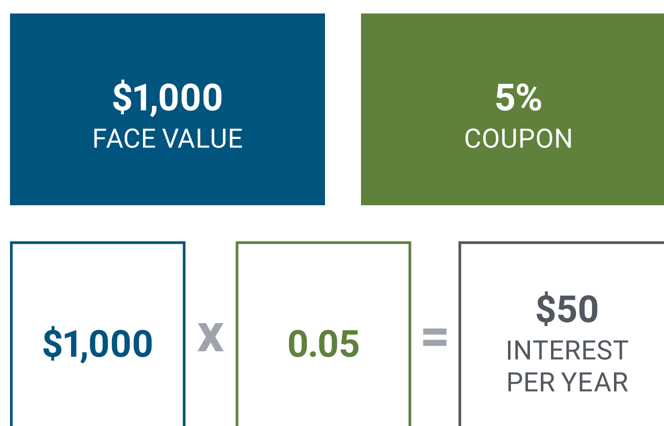
Bonds are basically loans. A company, state or government issues bonds to raise money. When an investor buys a bond they give the issuer – the company or government who issued the bond – a loan. Often, the bond issuer agrees to pay its investors periodic "fixed" interest payments (hence the name fixed income) while the loan is outstanding and to pay pack the full loan at the end of the bond's life (called maturity).

The amount that is given to the issuer is called the principal or face value of the bond. In return, the issuer agrees to pay the investor both the face value of the loan on a specific date (the "date of maturity") and to pay the investor periodic interest payments, known as coupons, in specific intervals.

The coupon is periodic interest payment that the bond holder receives from the issuer from its issue date until it matures. The coupon rate (expressed as a percentage) is calculated by adding the sum of coupons paid per year and dividing it by the bond's face value. Often coupons are paid semi-annually.

Unlike stocks, bonds issued by companies do not generally give investors ownership rights. Instead, bonds provide a stream of income. When held in a portfolio with stocks, bond investments may help reduce overall portfolio volatility.

If a bond has a face value of $1,000 and a coupon rate of 5% then it pays total coupons, or interest, of $50 per year (assumes annual payment)



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WHAT IS THE DIFFERENCE BETWEEN "YIELD" AND "INTEREST RATE"?

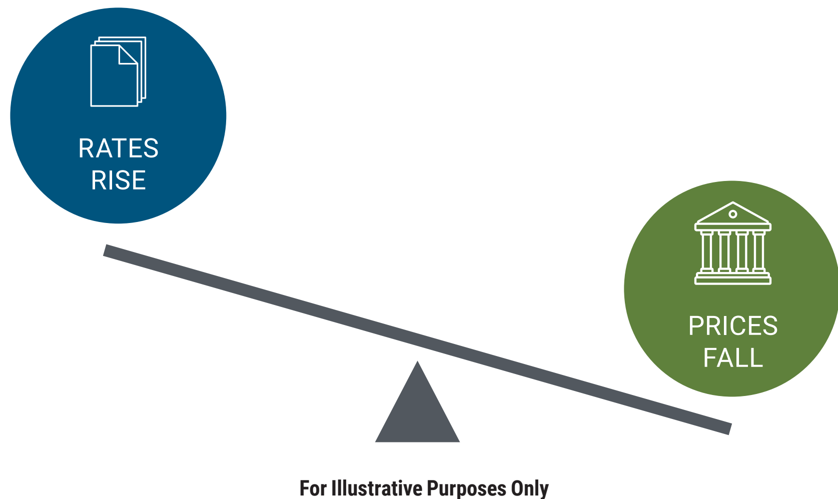
You'll hear the word "yield" often when discussing bonds. It's a measure of interest that takes into account the bond's fluctuating changes in value and is usually reported as an annual percent figure.

Yield is the annual income (percentage) that an investor earns on an investment. The **interest rate** is the percentage charged by a lender for a loan. The **yield** on new bonds reflects **interest rates** at the time they are issued.

Interest rates and bond prices

Interest rates are a key driver of how bonds are priced. If rates rise, older bonds with lower rates will drop in price to compensate for the lower coupon payments. The same is true for the opposite situation. If interest rates fall, bonds with higher rates will increase in price due to the demand for higher coupon payments.

Although rising rates will cause existing bond holdings to fall in price, higher interest rates and subsequent rising yields are a positive benefit for investors. After all, investors can reinvest maturing bonds into higher yielding fixed income securities and earn more.



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A WORD ABOUT TOTAL RETURN

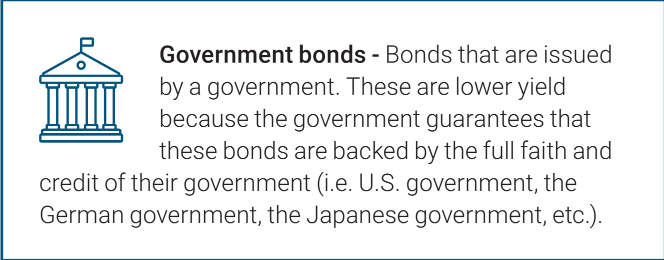
The total return of a bond has two components: the price of the bond and the coupon income or yield.

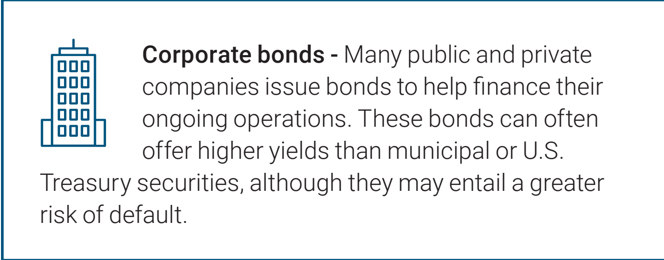
Total return = [(Current Price of Bond – Original purchase price of the investment + Distributions) / Original purchase price of an investment] x 100

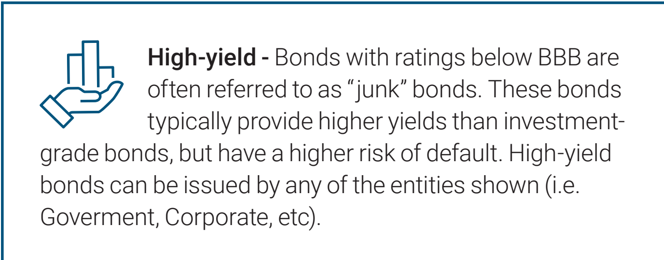
Even if a bond's price return falls as a result from higher bond yields, the income return that an investor experiences may be higher. That positive income return can help offset the price impact, resulting in overall positive total return.

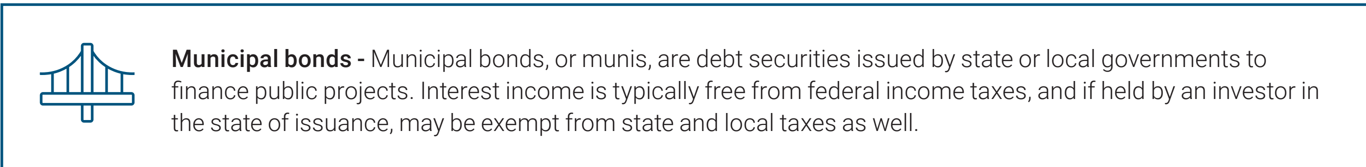
What Types of Bonds are There?

Bonds can be issued by companies or governments when they want to raise money. There are several types of bonds, including:





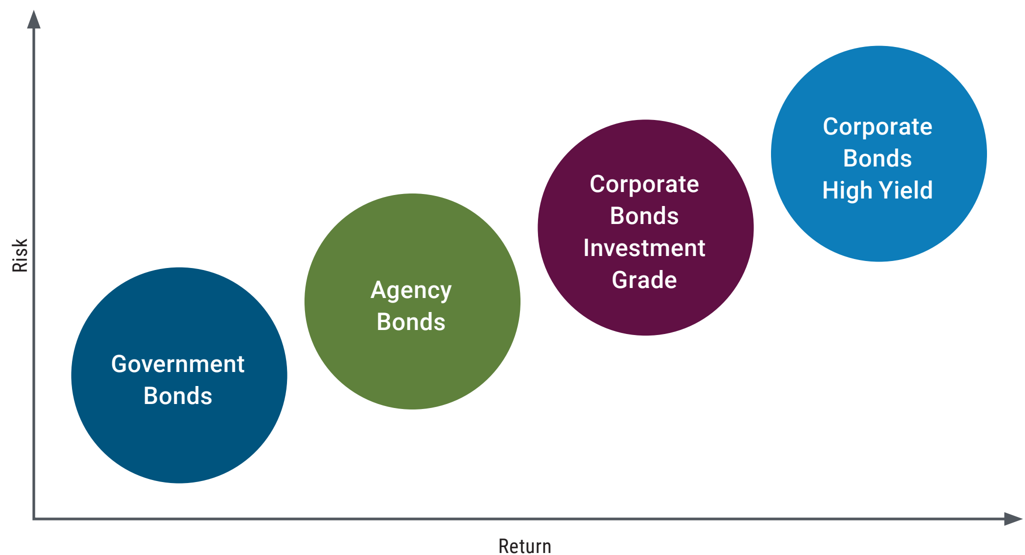




The global bond market is very diverse, and offers a range of risk and return opportunities.

On one end of the spectrum, there are lower yield government guaranteed bonds backed by the full faith and credit of a government, and on the end there are higher yielding bonds issued by speculative grade companies that may potentially experience some default of interest or principal.

Investors want compensation for taking on more risk



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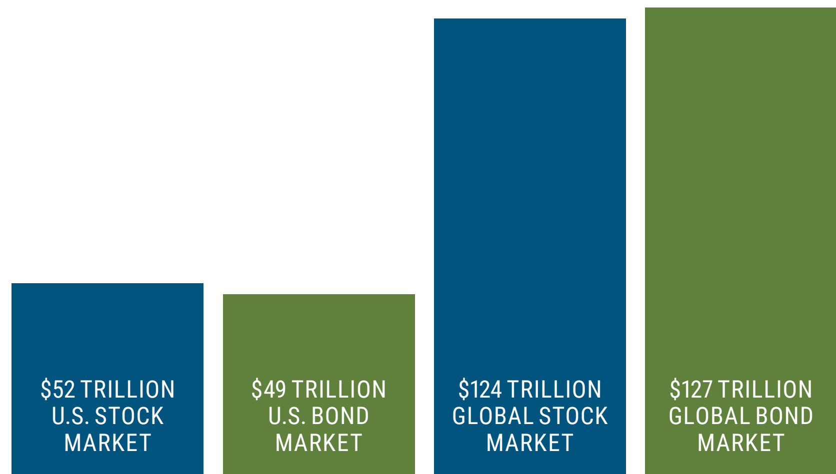
Source: PIMCO.

How Big is the Bond Market?

Many investors don't realize just how large the bond market is. At $49 trillion, the US bond market is only slightly smaller than the US stock market, and at $127 trillion, the global bond market is larger than the global stock market.[1] The bond market is, in part, so large because governments issue bonds, not stocks. For companies, bond financing can also be an attractive source of financing.



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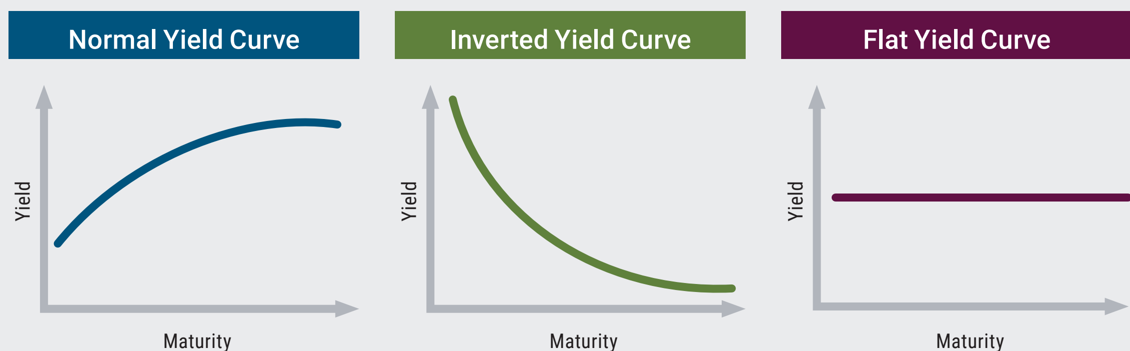
WHAT IS A YIELD CURVE AND WHAT DOES IT MEAN FOR ME?

The yield curve plots the interest rates for similar quality bonds against their maturities (years to expiration). There are three main types of yield curve:



Normal Yield Curves are seen during typical periods of economic expansion. The curve goes up from left to right. This upward slope indicates market participants believe rates are likely to go up – remember that if rates go up bond prices go down and yields go up.

An **Inverted Yield Curve** is seen during times of anticipated economic slowdown and in the past has been rare. The curve is inverted from a normal curve, it indicates market participants expect rates to go down, pushing bond prices up and yields down.

A **Flat Yield Curve** may be seen when the economy is in transition, so from expansion to slowdown or visa versa. It shows a relatively flat line. This type of curve suggests investors may not expect meaningful change in the interest rates.

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1. **Market values on stock and bond markets are based on estimates and are used for illustrative purposes only.**
SOURCE: SIFMA Capital Markets Fact Book 2022, Bank of International Settlements (BIS)

The Role of Bonds in a Diversified Portfolio

Bonds can play an important role in diversifying a portfolio. Three key potential reasons to consider bonds:

DEFENSE AGAINST CAPITAL LOSS

Barring default, the principal value of a bond is expected to be returned to the investor at maturity. This can make bonds attractive to risk-averse investors who are concerned about losing capital.

INCOME

Bonds can provide investors with a source of income in the form of coupon payments. Often coupon rates are set, so investors can receive this income during different market conditions.

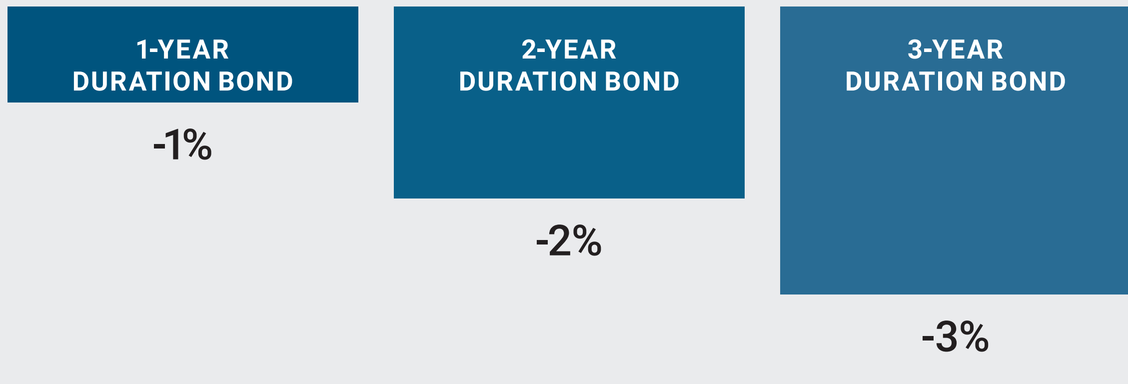
DIVERSIFICATION

Bonds may help diversify a portfolio of riskier assets like equities and this is generally due to the low to negative correlation of bonds with other asset classes.

WHAT IS DURATION?

Duration risk reveals how sensitive a bond is to interest rate movements. In general, the higher the duration, the more the bond value will fall if interest rates rise. Duration (measured in years) estimates the % change in a bond's price for a 1% change in yield.

HOW A 1% RISE IN INTEREST RATES CAN IMPACT BONDS WITH DIFFERENT DURATIONS



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Source: PIMCO.

Key Terms to Know

Asset-Allocation: How an investor distributes their money between different types of investments, such as stocks, bonds and cash. Asset allocation can help balance a portfolio's risk and return (a strategy known as diversification).

Coupon: A coupon is the annual interest payment that the bondholder receives from the bond from its issue date until it matures. Coupons are normally described as the “coupon rate,” which is calculated by adding the sum of coupons paid per year and dividing it by the bond's face value.

Equities: Ownership or proprietary rights and interests in a company.

Fixed Income: Securities/Investments in which the income during ownership is fixed or constant. Generally refers to any type of bond investment.

Maturity: The date on which a loan, bond, mortgage or other debt security becomes due and is to be paid off.

Spread: The risk premium that investors demand, over a base government bond yield, to compensate for the risk taken. Investors should understand that higher-yielding bonds often have considerably higher risk.

Yield: The annual income that an investor earns on an investment. Setting aside time and interest rates, a bond yield equals the bond's coupon. Money today is often not worth the same as in the future, though, so yields tend to be higher for longer-maturity bonds.

Interested in learning more? Speak with your financial professional or visit pimco.com

All investments contain risk and may lose value.

There is no guarantee that these investment strategies will work under all market conditions or are appropriate for all investors and each investor should evaluate their ability to invest long-term, especially during periods of downturn in the market.

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