ACTIVITY 5.3
THE ABCs OF BONDS

What Are Bonds?

Imagine that you are in the ice cream store with a friend on a Thursday evening and want to get a hot fudge sundae, but you realize you don't have any cash. You know you'll be getting your paycheck the next day, so you ask your friend to lend you a few dollars so you can have the sundae now. In return for the loan, you agree to pay your friend back tomorrow and buy lunch on Saturday as well. You may even write out the amount owed on a slip of paper, an "I.O.U." Your friend, finding these terms to his liking, lends you the money, and you enjoy a delicious sundae.

Governments and corporations often find themselves short of cash, just as you were on Thursday. One way to generate these needed resources is to issue *bonds*. A bond is similar to an I.O.U. When you purchase a bond, you are lending money to a government, a corporation, or some other entity, known as the bond *issuer*. In exchange for this loan, the issuer promises to pay you a specified rate of interest during the life of the bond and to repay the original loan (referred to as the *face value* or *par value* of the bond) when it comes due at its *maturity date*.

U.S. Government Bonds

When the U.S. government spends more than it collects in taxes, it borrows money by issuing bonds to cover the difference. The bonds issued by the U.S. government are called Treasury bonds. A special type of Treasury bond is a U.S. savings bond. U.S. savings bonds are issued in smaller amounts than other Treasury bonds. They are issued at half the face value and mature at face value at a date determined by the interest rate. For example, a $1,000 face value U.S. savings bond might sell for $500 today and, at the date of maturity, be redeemable for $1,000 (the face value). Treasury bonds and U.S. savings bonds are widely regarded as the safest bond investments, even in times of financial crisis. U.S. bonds are considered safest because they are backed by "the full faith and credit" of the U.S. government; an investor is therefore nearly certain to get paid back. In addition, the interest paid on U.S. government bonds cannot be taxed by state or local governments.

Municipal bonds are issued by states, counties, cities, towns, villages, and other units of local government. These bonds are considered fairly safe, but they are riskier than U.S. government bonds. The risk level for a municipal bond depends on the financial condition of the state or local government that issued it. The interest paid on most municipal bonds is not taxed by the federal government.

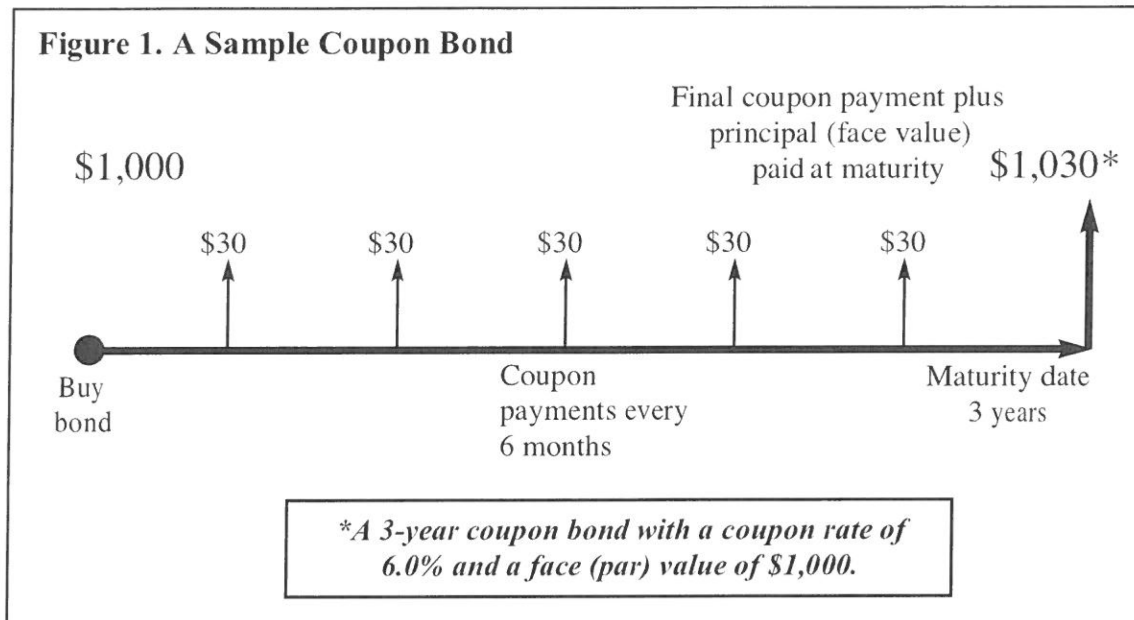
Corporate Bonds

As corporations grow, they often don't generate enough money to pay for the supplies necessary to keep growing. Many corporations issue bonds to pay for new capital equipment or to cover operating expenses. When a company issues bonds, it borrows money from investors in exchange for agreeing to pay them interest on their money at a set date in the future. Corporate bonds are generally riskier than government bonds because even large, stable companies are much more likely to go out of business than the U.S. government. Corporate bonds can also be the most lucrative bonds to invest in, as the investor is generally rewarded for the extra risk undertaken.

How Bonds Work

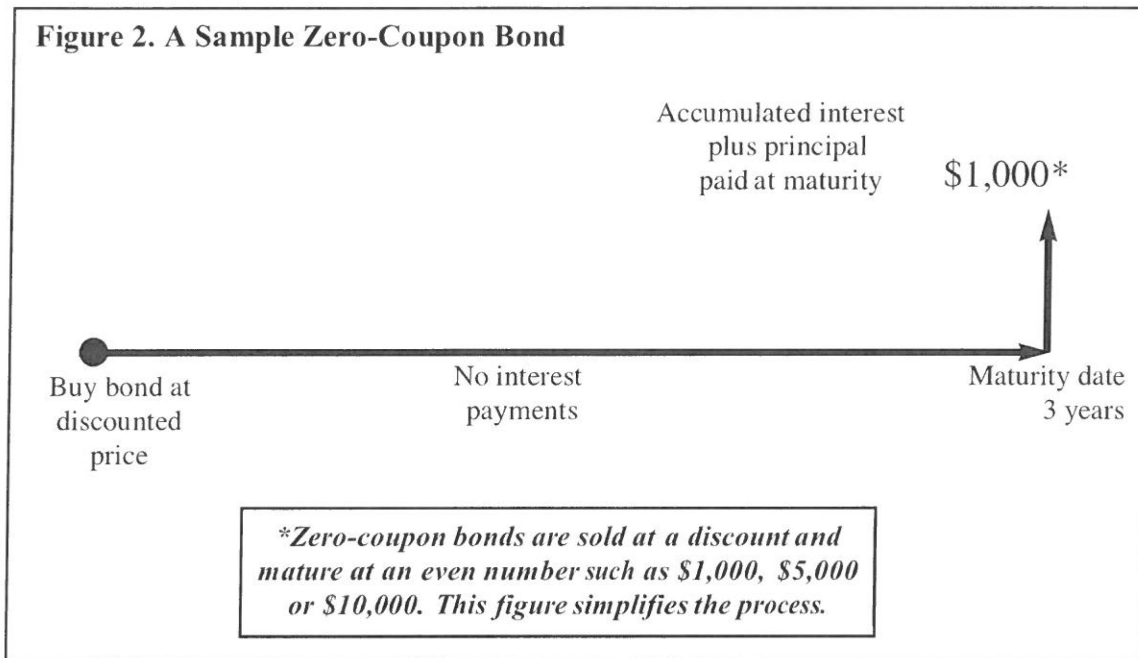
The most basic bond is called a *coupon bond*. Coupon bonds pay out an interest payment (called the *coupon*) to the investor every six months. The *principal* (also called the *face value* or *par value* of the bond) is paid to the investor at a specified *maturity date*, which can range from a few months to 30 years. These bonds are said to be *fixed-income* securities because the amount the investor receives is set, or fixed, by the coupon rate. Figure 1 presents a timetable showing how coupon payments work.

Figure 1. A Sample Coupon Bond



The other common bond is called a *zero-coupon bond*. Unlike coupon bonds, zero-coupon bonds do not make periodic interest payments to the investor. Rather, investors buy the bond at a reduced face value; then, at the maturity date, investors receive one payment. The payment is equal to the principal of the bond plus the interest that has accumulated during the time the bond has been held by the investor. Someone saving for a small child's future college expenses might use zero coupon bonds, set to pay off at the beginning of the college years. A U.S. savings bond is an example of a zero-coupon bond. Figure 2 presents a time-table graph showing how zero-coupon bonds work.

Figure 2. A Sample Zero-Coupon Bond



Why Buy a Bond?

Over the last 100 years, the stock market has provided, on average, higher returns than other forms of investment. So why not just invest in stocks? Although bonds do not provide the same rate of return as stocks in the long run, they have several characteristics that investors value.

First, safety. Many bonds provide investors with relatively safe investments. Treasury bondholders can be almost certain that they will receive the amount they originally invested, plus interest, and corporate bondholders can have nearly the same certainty. By contrast, investors can lose their entire investment in individual stocks; in fact, that outcome occurs frequently—as it did, for some investors, in the recession of 2007-2009.

Second, regular income. Coupon bonds pay interest to investors at set intervals, and this arrangement can provide valuable income for those who need a regular cash flow—retirees, for example. If someone owned $100,000 worth of coupon bonds that paid 8 per cent interest annually (that would be $8,000 per year), one-half of that interest would be sent to the bondholder every six months, providing income to invest elsewhere.

Third, capital gains. Some people buy bonds to earn capital gains. Bond prices tend to change with interest rates. When interest rates fall, bond prices rise. When interest rates rise, existing bond prices fall. Some people buy bonds to make capital gains when interest rates fall. To do this, you must sell a bond at a new, higher price before the maturity date.

Fourth, taxes. Bonds can also provide a tax advantage. When a government issues bonds to raise money to build bridges or roads, the interest investors earn can be tax-exempt. Earnings on U.S. Treasury bonds are exempt from state and local taxes. Earnings on municipal bonds are exempt from federal taxes. Tax exemption can be an important factor for those who are eager to reduce the amount they pay in taxes.

A Review of Bond Terminology

Bond	Bonds are similar to an I.O.U. When you buy a bond, you make a loan to a government or a corporation in return for promised repayment at a specified rate of interest.
Coupon bond	A bond that pays out interest at fixed intervals (usually every six months) over the time the bond is held by the investor.
Coupon	The interest payment on a coupon bond.
Face value	The price an investor pays for a bond (also called par value or principal).
Fixed-income security	An investment in which the amount of income an investor receives is set, or fixed, by the issuer.
Issuer	The entity (government or corporation) that writes the bond purchased by investors.
Maturity date	The date at which the bond matures and the final payment is made to the investor.
Municipal bond	A bond issued by state or local governments.
Par value	The price an investor pays for a bond (also called face value or principal).
Principal	The initial cost of the bond (also known as the par value or face value of the bond).
Zero-coupon bond	A bond whose purchase price is below face value. One payment is made at maturity that includes the principal plus accumulated interest.