BONDS

AN INTRODUCTION TO THE CORE CONCEPTS

MARK MOBIUS MASTERCLASS

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Mark Mobius
Executive Chairman of Templeton Emerging Markets Group

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AN INTRODUCTION TO BONDS

When people talk about investing, they often utter the words "stocks and bonds" in the same breath. The two go together like "bread and butter." But as soon as the conversation shifts to the latest glamour stocks, the subject of bonds often gets lost in the shuffle.

Compared to the more volatile ups and downs of stocks, bonds are, generally, steady, conservative investments that pay interest and return the principal at maturity. They are also called fixed income securities or debt instruments.

If stocks are perceived as being the focus of attention at the conversational level, on a global level the amount actually invested in bonds far exceeds that of stocks. Figures from TheCityUK show that the worldwide value of all bonds outstanding was a record US$95 trillion in 2010, with about US$35 trillion in the U.S. bond market. This contrasts with US$47.8 trillion for global equity-market capitalization in the same year, according to data gathered by the World Federation of Exchanges and various stock exchanges globally. Looked at from another perspective, the value of bonds outstanding worldwide is about five times the current gross domestic product of the United States. From 1990 to the first quarter of 2007, the global bond market mushroomed in size by 313 percent. So, clearly, interest in bonds is stronger than it has ever been. The three main attractions of bonds are that they provide:

1. Predictable income streams
2. Capital preservation
3. Portfolio diversification

At one time, the relative safety of bonds led some to dub them—somewhat cavalierly—as an investment vehicle for widows and orphans. More commonly, they became a favorite of the rich. The phrase "clipping coupons" entered the vernacular as a reference to a bond's interest payments. Years ago, bonds came with a set of coupons that could be detached and periodically redeemed for cash. These were called bearer bonds, and the coupons were the sole proof of ownership. The term "clipping coupons" still lingers, even though all bonds issued in the United States since 1983 have been registered, meaning that the owner's name is recorded so that interest payments can be mailed. Registration also helps tax authorities keep track of tax collections. Many international bonds, however, are still in bearer form.

Today, institutional investors such as banks and pension funds represent the majority of bondholders. Individual investors, however, maintain a fairly firm grip on the bond market. Their participation is expected to increase as baby boomers reach retirement age and seek investments that offer both income and investment stability.

THE HISTORY OF BONDS

Bonds have a storied history dating back to the thirteenth century, when the Venetian government issued the Venetian *prestiti*, which was designed to pay 5 percent interest twice a year *forever* but never actually mature. In other words, the principal was never paid back. (Even the interest payments stopped in the fifteenth century when Venice was decimated by wars with the Turks.) The *prestiti* concept proved so successful that as England and France rose to power they issued their own perpetual bonds, called *consols* and *rentes*, respectively.

In the United States after the Civil War, corporate bonds helped finance the railroad-building boom (some of which defaulted leaving bondholders in the lurch). Bonds reached their heyday during World War II when the U.S. government raised almost US$200 billion in war bonds to help propel the Allies to victory. They have been and are the main instrument for financing economic growth and development on an international scale.

Bonds started to become more available to smaller investors in the 1980s. A series of laws deregulating financial markets resulted in many bonds being packaged into much more affordable denominations than the US$10,000, US$50,000, or even US$100,000 minimums that had previously been the norm. Suddenly, the small investors had a chance to rub shoulders with the wealthy and the big institutions who were the main players in the bond market.

BOND ESSENTIALS

Bonds are basically long-term IOUs between a borrower and a lender. When a government, corporation, agency, or other entity needs to raise capital for business expansion or for infrastructure projects such as roads, schools, and airports, they borrow money from investors.

Investors who purchase a bond are essentially loaning money to these issuers for a fixed period of time. In return, investors receive a promise that they will receive interest payments at certain intervals and also have their principal returned on a stated future date.

The details are spelled out in a contract called the bond *indenture*, which is a legally binding document. The indenture can be quite lengthy and extremely tedious to read, but it is important because it contains all the relevant facts about the bond issue.

These include information about the type of the bond, the size of the issue, the terms, the financial backing for the issue, provisions that protect the investor, call privileges, and the appointment of a trustee to represent bondholders. Should the issuer fail to live up to the terms of the contract, bondholders are entitled to pursue legal remedies.

The bond business is rife with jargon and terminology. The basic terms are explained below (adapted from www.investopedia.com). For a fuller, more comprehensive list, see the Glossary.

Face Value (or Par Value)

This is the dollar value of a bond that is to be repaid at maturity. In other words, this is what the investor has loaned to the issuer and will get back. Generally, bonds are issued in denominations of US$1,000, but some can be in denominations of US$5,000 or even larger.

Coupon Rate

This is the amount of interest, stated in percentage terms, the bond is going to pay on a quarterly, semiannual, or annual basis. This rate remains in effect for the life of the bond even as the bond's price fluctuates. For example, a US$1,000 bond with a 10 percent coupon paid annually earns US$100 in interest each year. That same bond with a 10 percent coupon paid semiannually earns US$50 twice a year. Most bonds pay interest semiannually. The former method of clipping coupons has been largely replaced by an automated system where interest is mailed directly to the registered bondholder or deposited in investment accounts.

Receiving a dependable stream of income from regular interest payments is one of the attractions of investing in bonds. But not all bonds subscribe to this fixed-payout formula. Some bonds pay a floating rate of interest, where the rate is adjusted periodically in line with some measure of market rates, such as the rate on Treasury bills. This means the bond always pays interest that is at least in the ballpark of prevailing interest rates. The major risk with this type of bond has to do with changes to the financial health of the issuer. The interest rate floats only in response to interest-rate conditions; it has nothing to do with the issuer's creditworthiness.

Zero-coupon bonds do not make periodic interest payments but, rather, pay their interest in a lump sum at maturity. Zeros are sold at deep discounts to their face value, such as US$650 for a US$1,000 bond. At maturity, the full US$1,000 is paid, reflecting the amount that was originally paid and the interest that has accumulated over time.

Maturity Date

This is the date on which the principal is paid back. The last interest payment is also made on that date. Bonds feature a range of maturities, from 1 day to 30 years. Short-term bonds are those that mature in 2 years or less; intermediate bonds have maturities of up to 10 years, while long-term bonds are 10 years or longer.

Price

A bond's price is not simply a matter of quoting its face value, because if the bond is traded on the secondary market before it reaches maturity, the price is affected by the rise or fall of interest rates and credit quality.

An important rule to bear in mind is that when market interest rates go up, bond prices go down, and vice versa. For example, if you have a 10-year US$1,000 bond that pays a coupon rate of 5 percent and market interest rates suddenly fall to 4 percent, a bond with a 5 percent coupon rate looks more attractive (like finding a bank that pays a higher interest rate on a savings account), and people will pay more than the face value to buy it—US$1,081.04, in fact. Selling it would produce a capital gain of US$81.04. (A bond that sells above par value is called a *premium* bond.)

On the other hand, if market interest rates rise to 6 percent, a 5 percent coupon rate loses some of its appeal, and the price of the bond declines to US$926.39—a capital loss of US$73.61. (A bond selling below par value is termed a *discount* bond.) We will look more closely at the mathematics of bonds in a later chapter. For now, it's enough to say that any adjustment in price fully reflects the impact of the new market interest rate and makes the value of the bond equivalent to others paying a coupon at the higher or lower market rate.

Yield

There are three kinds of yields that investors need to be concerned about—the coupon yield, the current yield, and the yield to maturity. The coupon yield is simply the interest rate on a bond promised by the issuer, expressed in percentage form. In our example above, the coupon yield on the US$1,000 bond is 10 percent. This allows investors to calculate their interest payments over the life of the bond.

The current yield is the bond's annual coupon payment divided by its market price. If a US$1,000 par-value bond with a 10 percent coupon is selling for US$950 in the secondary market, the current yield is US$100/$950 = 10.52 percent. This is useful for providing a rough estimate of the return on an investment if a bond was purchased at something other than par.

The yield to maturity is a truer measure of a bond's total return because it looks at several factors, such as principal, interest, and the time to redemption. This is the one that most people refer to when they mention "yield." The yield to maturity takes into account the difference between what was paid for the bond in the secondary market and its redemption value at maturity. Obviously, this doesn't apply if the bond was purchased at par value. It also considers the amount earned from reinvesting the bond's coupon income over time and the effect that compounding can have on the return.

Seniority

Like preferred stock, bonds are regarded as senior securities. This means that paying interest on bonds receives a higher priority than dividends paid to common stockholders. If the bond issuer runs into financial trouble, bondholders (who are creditors) rank ahead of common stockholders when a company's assets are distributed.

Sinking Fund

Bonds can be repaid at maturity but can also be redeemed in part or in their entirety before that date. Early repayment is often handled through a sinking fund. This is a special account into which money is deposited and managed by the bond trustee, who uses the funds to pay off portions of the bond issue. Having such a fund is reassuring and helps minimize the risk of the issuer not being able to repay the principal when it comes due. Details of the sinking fund can be found in the *indenture.*

Call Provisions

These allow the issuer to buy back, or call, part or all of the bond issue before maturity. The most common reason for repurchasing bonds early is that interest rates have dropped and the issuer wants to save money on the coupon payments by reissuing bonds at the lower market interest rate. Generally, the call price is above the bond's par value. The call premium, as the difference in price is known, is designed to placate bondholders who might not be very happy about losing the higher coupon rate. Lower coupon rates can affect the bondholder's yield to maturity. Call provisions can kick in within a few years of the bond being issued, but some bonds have what is known as a deferred call provision, which means they cannot be called for a certain period of time—say, the first 10 years.

Negative Covenant

A bond covenant preventing certain activities, unless agreed to by the bondholders. Negative covenants are written directly into the agreement creating the bond issue, are legally binding on the issuer, and exist to protect the best interests of the bondholders. This arrangement is also referred to as a restrictive covenant. Think of a negative covenant as a promise not to do something. Usually, negative covenants limit the amount of dividends a firm can pay to shareholders and restrict the ability of the firm to issue additional debt. Generally, the more negative covenants exist in a bond issue, the lower the interest rate on the debt will be since the restrictive covenants make the bonds safer in the eyes of investors.

Affirmative Covenant

This is a type of promise or contract that requires a party to do something. For example, a bond covenant that provides that the issuer will maintain adequate levels of insurance or deliver audited financial statements is an affirmative covenant. Affirmative (or positive) covenants can be compared to restrictive (or negative) covenants, which require a party not to do something, such as sell certain assets. In bond agreements, both affirmative and restrictive covenants are used to protect the interests of both issuer and bondholder.

Protective Covenant

This affords bondholders legal protections by limiting issuers from taking certain actions during the life of the bond. Negative covenants prohibit an issuer from doing certain things and positive covenants specify that actions must be taken or conditions fulfilled. An example of the former might be not allowing a company that has issued corporate bonds to issue further long-term debt. As for the latter, the covenant might demand that assets be maintained in good condition.

STOCKS VERSUS BONDS

Between 1870 and 1940, stocks and bonds posted approximately equivalent returns. It has only been since World War II that stocks have outstripped bonds in total returns. From the postwar period until recent years, the long-term return on all bonds was only about half that of stocks. When inflation is factored in, the real return was more like one-third.

If those results seem disappointing, other considerations favor bonds. Bonds may not have soared as high as stocks but neither have they nose-dived as badly as stocks. After the stock market crash of 1929 that ushered in the Great Depression, stocks posted their worst year in 1931, with a loss of 43.13 percent. The worst year for bonds was 1969 when they lost 8.13 percent. Stocks rebounded in 1933 with a gain of 54.20 percent, while bonds had their best year in 1982, with a rise of 32.62 percent.

Bonds tend to be safer and less volatile than stocks, but this doesn't mean they are absolutely safe. Only U.S. government securities such as Treasury bills, notes, and bonds are risk-free. Thousands of other bonds on the market issued by corporations and financial institutions range from top-of-the line investment-grade bonds to higher-yield, speculative issues ("junk bonds"). However, investors should derive some comfort in knowing that the global default rate on investment-grade bonds has been less than 1 percent for the past 20 years.

When major bond defaults do occur, they attract attention. One of the largest defaults in history dates back to the Russian Revolution of 1917 and its overthrow of the czarist regime. When the regime came to an end, billions of rubles worth of bonds suddenly became virtually worthless. During Argentina's severe economic crisis of 2001–2002, the country could only manage to pay 25 cents on the dollar on its US$90 billion outstanding bond debt.

In the United States, recent corporate bond defaults have included airlines such as Delta and Northwest and energy-trading company Enron. General Motors and Ford have both seen their bonds downgraded from investment grade to speculative grade. Only one major city since the Great Depression has actually defaulted on its bonds—Cleveland in 1978. A few years earlier, New York City came close to default but was saved by a massive federal bailout.

BOND FUNCTIONS

Governments, public agencies, and corporations all have reasons for issuing bonds. Contrary to what many might think, government tax revenues (income tax, sales tax, gasoline tax, and so on) and fees are not sufficient to fund the many public services that are now taken for granted. Issuing a bond allows a government to quickly raise the needed sums for a new school or road project, for example, without having to resort to raising taxes. With about US$8 trillion in outstanding debt, the U.S. Department of the Treasury maintains the distinction of being the world's biggest bond market.

Bonds allow corporations to rapidly raise billions to finance everything from new acquisitions to new capital equipment. They offer an alternative to issuing new stock, which might not be welcomed by stockholders for two reasons. If demand for the company's stock remained essentially the same, more shares would dilute existing stockholders' equity and could even cause the stock's price to decline. Corporations also gain tax benefits from issuing bonds that wouldn't apply to new stock. Interest payments to bondholders allow companies to claim a pretax deduction on the interest expense, thus reducing their overall tax bill.

WHAT DO BONDS OFFER?

All investments carry some risk, but some investments are riskier than others. When people refer to the risk of an investment, they are talking about whether they might lose money. For bonds traded on the secondary market (and not held to maturity), this could mean a loss of principal if changes in market interest rates cause the bond's price to depreciate. The return is the possibility of making money. With stocks, this refers to both capital appreciation when a stock's price goes up and to dividends that shareholders receive. A bond's return reflects its interest payments and any appreciation in its price from interest-rate movements—again this applies only if the bonds are traded. However, as a general rule, the return potential of bonds is rather modest compared with other investments.

So why are bonds such popular investments? One reason is that, unlike stocks, they allow investors to sleep at night because there are no stomach-churning, roller-coaster rides in prices to worry about. During uncertain economic times or when a recession is looming, investors typically flock to the safe haven of bonds. The most attractive quality of bonds is their regular payment stream. For retirees or others needing a predictable source of income, a bond's interest payments provide a comforting level of security. If a major expense is on the horizon—say, a down payment on a house or college tuition—knowing that the principal will be returned on a particular date allows for prudent financial planning. This is especially true of the short-term (less than two years) cash needs for investors who can't risk losing capital. In such a case, if the stock market experiences a sudden downturn, there might not be enough time to recover financially to pay a big bill.

Many investors also try to align their bond maturities to meet future expenses. Even for those who don't need to rely on the income from their bonds, the amount of interest paid can be invested in the stock market or in new bonds on a schedule that takes advantage of dollar-cost averaging. With bonds as an anchor for a portfolio, an investor may feel more comfortable taking on greater risk with other investible assets in hopes of achieving a greater return.

Bonds also offer an excellent means of diversifying a portfolio. Every savvy investor has heard about the importance of diversification; that is, spreading risk over various kinds of assets—stocks, bonds, and cash. This is a safe investment strategy. Diversification can reduce risk as well as improve a portfolio's overall rate of return if the assets within it are uncorrelated. What this means is that the stocks in a portfolio should behave differently from the bonds in the portfolio, given similar market conditions. As one goes up, the other goes down and vice versa. The key to diversification is building a portfolio of several asset classes, which, over the long term, may produce favorable returns but do not move in the same direction at the same time.

Because bonds are fixed-income investments, inflation is always a paramount concern since it can easily erode any gains. As prices creep higher, purchasing power declines. Inflation is the bane of anyone living on a fixed income. The aim of investing is to earn a return that at least keeps pace with inflation. Investors should make a point of calculating their real returns, rather than simply relying on what the bond's coupon rate pays. Real return is calculated by subtracting the inflation rate (say, 3 percent) from the nominal or stated return (say, a bond with a coupon rate of 5 percent)—(5% − 3% = 2%). Those who like to gamble with their money might well sniff at a bond's real return. But everyone has heard tales of gamblers who ended up losing all their money. Thanks to the power of compounding on reinvested income payments, even small real returns can add up to a considerable amount over time.

The fixed-income universe offers a vast expanse of choices for the discerning investor. Literally thousands of bond issues are available, each with its own yields, maturities, and risk characteristics—from the most conservative to the most adventurous. Many short-term and long-term bonds can be bought and sold easily, but not all bonds are tradable, and some smaller issues may lack liquidity. The latter problem can be avoided by sticking to government bonds or those of well-known corporations.

However, there is no one single strategy for investing in bonds and no best way to time the market for the best return. Devising an appropriate strategy starts with investors thoroughly evaluating their personal needs and financial resources. This includes making an honest assessment of the level of risk that can be tolerated, taking into account such things as age, family situation, and existing debt. Bonds are not get-rich-quick financial instruments and can be complicated to understand. They are best for investors who are not looking for spectacular growth, but who, by temperament or financial situation, are content with earning a steady income and knowing that their original investment, if they have done their homework and chosen a creditworthy bond, will be returned to them at a fixed time.

SUMMARY

Bonds, also referred to as fixed-income securities or debt instruments, are loans made by investors to governments, financial institutions, corporations, and other entities for a fixed period of time. In return for these loans, investors receive regular interest payments and the return of their principal on the maturity date.

The history of bonds dates back to thirteenth-century Venice, and they have been used to raise money for economic growth and development around the world. They pay for new roads, schools, factories, corporate acquisitions, and more.

Stocks and bonds once had nearly equivalent returns but bonds have lagged behind stocks in the years since World War II. Inflation can also chip away at gains from fixed-income investments such as bonds, although the bond market is actually much larger than that of stocks. The advantages of bonds are that they are less volatile than equities, they offer a regular schedule of interest payments, the principal is returned on the maturity date, and they provide investment diversification. The best strategy for investing in bonds takes into account an investor's personal needs, investment resources, and tolerance for risk. Bonds have a role to play in everyone's portfolio.