An Investor's Guide *to* Bond Basics

U.S. GOVERNMENT SECURITIES

MUNICIPAL BONDS

MORTGAGE-BACKED SECURITIES

CORPORATE BONDS

FEDERAL AGENCY SECURITIES

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WHAT ARE BONDS?

A bond is a debt security, similar to an I.O.U. When you purchase a bond, you are lending money to a government, municipality, corporation, federal agency or other entity known as the issuer. In return for the loan, the issuer promises to pay you a specified rate of interest during the life of the bond and to repay the face value of the bond (the principal) when it "matures," or comes due.

Among the types of bonds you can choose from are: U.S. government securities, municipal bonds, corporate bonds, mortgage and asset-backed securities, federal agency securities and foreign government bonds.

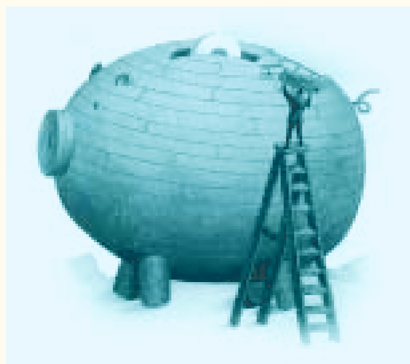
WHY INVEST IN BONDS?

Many personal financial advisors recommend that investors maintain a diversified investment portfolio consisting of bonds, stocks and cash in varying percentages, depending upon individual circumstances and objectives. Because bonds typically have a predictable stream of payments and repayment of principal, many people invest in them to preserve and increase their capital or to receive dependable interest income. Whatever the purpose—saving for your children's college education or a new home, increasing retirement income or any of a number of other financial goals—investing in bonds can help you achieve your objectives.

That's especially true for retirement planning. During the past decade, the traditional fixed-benefit retirement plans have increasingly been replaced by defined contribution programs, such as 401(k) plans. Because these plans offer greater individual freedom

in selecting from a range of investment options, investors must be increasingly self-reliant in securing their retirement lifestyles.

The diversity of fixed-income securities presents investors with a wide variety of choices to tailor investments to their individual financial objectives. Whatever your goals, your investment advisor can help explain the numerous investment options available to help you reach them, taking into account your income needs and tolerance for risk.



KEY BOND INVESTMENT CONSIDERATIONS

There are a number of key variables to look at when investing in bonds: the bond's maturity, redemption features, credit quality, interest rate, price, yield and tax status. Together, these factors help determine the value of your bond investment and the degree to which it matches your financial objectives.

Interest Rate Bonds pay interest that can be fixed, floating or payable at maturity. Most debt securities carry an interest rate that stays fixed until maturity and is a percentage of the face (principal) amount. Typically,

investors receive interest payments semiannually. For example, a $1,000 bond with an 8% interest rate will pay investors $80 a year, in payments of $40 every six months. When the bond matures, investors receive the full face amount of the bond—$1,000.

But some sellers and buyers of debt securities prefer having an interest rate that is adjustable, and more closely tracks prevailing market rates. The interest rate on a floating-rate bond is reset periodically in line with changes in a base interest-rate index, such as the rate on Treasury bills. Some bonds have no periodic interest payments. Instead, the investor receives one payment—at maturity—that is equal to the purchase price (principal) plus the total interest earned, compounded semiannually at the (original) interest rate. Known as zero-coupon bonds, they are sold at a substantial discount from their face amount. For example, a bond with a face amount of $20,000 maturing in 20 years might be purchased for about $5,050. At the end of the 20 years, the investor will receive $20,000. The difference between $20,000 and $5,050 represents the interest, based on an interest rate of 7%, which compounds automatically until the bond matures. If the bond is taxable, the interest is taxed as it accrues, even though it is not paid to the investor before maturity or redemption.

Maturity A bond's maturity refers to the specific future date on which the investor's principal will be repaid. Bond maturities generally range from one day up to 30 years. In some cases, bonds have been issued for terms of up to 100 years. Maturity ranges are often categorized as follows:

- Short-term notes: maturities of up to five years;
- Intermediate notes/bonds: maturities of five to 12 years;
- Long-term bonds: maturities of 12 or more years.

Redemption Features While the maturity period is a good guide as to how long the bond will be outstanding, certain bonds have structures that can substantially change the expected life of the investment.

CALL PROVISIONS For example, some bonds have redemption, or "call," provisions that allow or require the issuer to repay the investors' principal at a specified date before maturity. Bonds are commonly "called" when prevailing interest rates have dropped significantly since the time the bonds were issued. Before you buy a bond, always ask if there is a call provision and, if there is, be sure to obtain the "yield to call" as well as the "yield to maturity." Bonds with a redemption provision usually have a higher annual return to compensate for the risk that the bonds might be called early.

PUTS Conversely, some bonds have "puts," which allow the investor the option of requiring the issuer to repurchase the bonds at specified times prior to maturity. Investors typically exercise this option when they need cash for some purpose or when interest rates have risen since the bonds were issued. They can then reinvest the proceeds at a higher interest rate.

PRINCIPAL PAYMENTS AND AVERAGE LIFE

In addition, mortgage-backed securities are typically priced and traded on the basis of their "average life" rather than their stated maturity. When mortgage rates decline, homeowners often prepay mortgages, which may

result in an earlier-than-expected return of principal to an investor. This may reduce the average life of the investment. If mortgage rates rise, the reverse may be true—homeowners will be slow to prepay and investors may find their principal committed longer than expected.

Your choice of maturity will depend on when you want or need the principal repaid and the kind of investment you are seeking within your risk tolerance. Some individuals might choose short-term bonds for their comparative stability and safety, although their investment returns will typically be lower than would be the case with long-term securities. Alternatively, investors seeking greater overall returns might be more interested in long-term securities despite the fact that their value is more vulnerable to interest rate fluctuations and other market risks as well as credit risk.

Credit Quality Bond choices range from the highest credit quality U.S. Treasury securities, which are backed by the full faith and credit of the U.S. government, to bonds that are below investment-grade and considered speculative. Since a bond may not be redeemed, or reach maturity, for years—even decades—credit quality is another important consideration when you're evaluating a fixed-income investment. When a bond is issued, the issuer is responsible for providing details as to its financial soundness and creditworthiness. This information is contained in a document known as an offering document, prospectus or official statement, which will be provided to you by your investment advisor. But how can you know whether the company or government entity whose bond you're buying will be able to make its

regularly scheduled interest payments in five, 10, 20 or 30 years from the day you invest? Rating agencies assign ratings to many bonds when they are issued and monitor developments during the bond's lifetime. Securities firms and banks also maintain research staffs which monitor the ability and willingness of the various companies, governments and other issuers to make their interest and principal payments when due. Your investment advisor can supply you with current research on the issuer and on the characteristics of the specific bond you are considering.

Credit Ratings In the United States, major rating agencies include Moody's Investors Service, Standard & Poor's Corporation and Fitch. Each of the agencies assigns its ratings based on in-depth analysis of the issuer's financial condition and management, economic and debt characteristics, and the specific revenue sources securing the bond. The highest ratings are AAA (S&P and Fitch) and Aaa (Moody's). Bonds rated in the BBB category or higher are considered investment-grade; securities with ratings in the BB category and below are considered "high yield," or below investment-grade. While experience has shown that a diversified portfolio of high-yield bonds will, over the long run, have only a modest risk of default, it is extremely important to understand that, for any single bond, the high interest rate that generally accompanies a lower rating is a signal or warning of higher risk.

CREDIT RATING

Credit risk	Moody's	Standard & Poor's	Fitch
INVESTMENT-GRADE			
Highest quality	Aaa	AAA	AAA
High quality (very strong)	Aa	AA	AA
Upper medium grade (strong)	A	A	A
Medium grade	Baa	BBB	BBB
NOT INVESTMENT-GRADE			
Somewhat speculative	Ba	BB	BB
Speculative	B	B	B
Highly speculative	Caa	CCC	CCC
Most speculative	Ca	CC	CC
Imminent default	C	C	C
Default	C	D	D

How can you find out if the credit factors affecting your bond investment have changed? Usually, rating agencies will signal they are considering a rating change by placing the security on CreditWatch (S&P), Under Review (Moody's) or on Rating Watch (Fitch). The rating agencies make their ratings available to the public through their ratings information desks. In addition, their published reports and ratings are available in many local libraries. Many also provide online ratings information that can be accessed through the Internet.

Bond Insurance Credit quality can also be enhanced by bond insurance. Specialized insurance firms serving the fixed-income market guarantee the timely payment of principal and interest on bonds they have insured. In the United States, major bond insurers include MBIA, AMBAC, FGIC and FSA. (See glossary for list.) Most bond insurers have at least one triple-A rating from a nationally recognized rating agency attesting to their

financial soundness; and insured bonds, in turn, receive the same rating based on the insurer's capital and claims-paying resources. While the focus of their underwriting activities has historically been in municipal bonds, bond insurers also provide guarantees in the mortgage and asset-backed securities markets and are moving into other types of securities as well.

Price The price you pay for a bond is based on a whole host of variables, including interest rates, supply and demand, credit quality, maturity and tax status. Newly issued bonds normally sell at or close to their face value. Bonds traded in the secondary market, however, fluctuate in price in response to changing interest rates. When the price of a bond increases above its face value, it is said to be selling at a *premium*. When a bond sells below face value, it is said to be selling at a *discount*.

Yield Yield is the return you actually earn on the bond—based on the price you paid and the interest payment you receive. There are basically two types of bond yields you should be aware of: current yield and yield to maturity or yield to call. Current yield is the annual return on the dollar amount paid for the bond and is derived by dividing the bond's interest payment by its purchase price. If you bought at $1,000 and the interest rate is 8% ($80), the current yield is 8% ($80 ÷ $1,000). If you bought at $900 and the interest rate is 8% ($80), the current yield is 8.89% ($80 ÷ $900).

Yield to maturity and yield to call, which are considered more meaningful, tell you the total return you will receive by holding the bond until it matures or is called. It also enables you to compare bonds with different maturities and coupons. Yield to maturity equals all the interest you receive from the time you purchase the bond until maturity (including interest on interest at the original purchasing yield), plus any gain (if you purchased the bond below its par, or face, value) or loss (if you purchased it above its par value). Yield to call is calculated the same way as yield to maturity, but assumes that a bond purchased at a premium will be called and that the investor will receive face value back at the call date. You should ask your investment advisor for the yield to maturity or yield to call on any bond you are considering purchasing. Buying a bond based only on current yield may not be sufficient, since it may not represent the bond's real value to your portfolio.

Market Fluctuations: The Link Between Price and Yield From the time a bond is originally issued until the day it matures, its price in the marketplace will fluctuate according to changes in market conditions or credit quality. The constant fluctuation in price is true of individual bonds—and true of the entire bond market—with every change in the level

of interest rates typically having an immediate, and predictable, effect on the prices of bonds.

When prevailing *interest rates rise, prices of outstanding bonds fall* to bring the yield of older bonds into line with higher-interest new issues.

When prevailing *interest rates fall, prices of outstanding bonds rise*, until the yield of older bonds is low enough to match the lower interest rate on new issues.

Because of these fluctuations, you should be aware that the value of a bond will likely be higher or lower than its original face value if you sell it before it matures.

The Link Between Interest Rates and Maturity

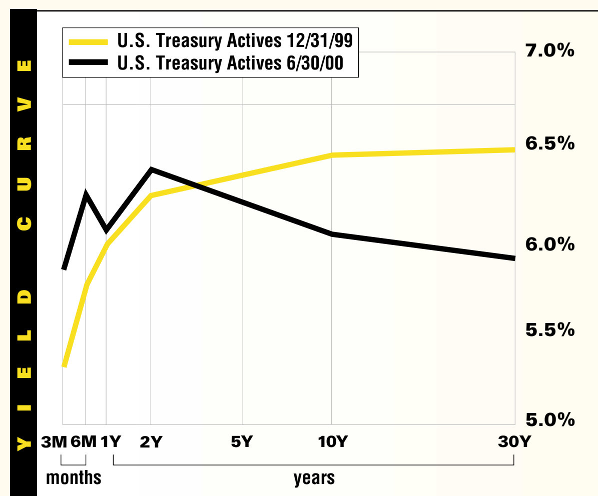
Changes in interest rates don't affect all bonds equally. The longer it takes for a bond to mature, the greater the risk that prices will fluctuate along the way and that the fluctuations will be greater—and the more the investors will expect to be compensated for taking the extra risk. There is a direct link between maturity and yield. It can best be seen by drawing a line between the yields available on like securities of different maturities, from shortest to longest. Such a line is called a yield curve.

A yield curve could be drawn for any bond market but it is most commonly drawn for the U.S. Treasury market, which offers securities of every maturity, and where all issues bear the same top credit quality.

By watching the yield curve, as reported in the daily financial press, you can gain a sense of where the market perceives interest rates to be headed—one of the important factors that could affect your bonds' prices.

A normal yield curve would show a fairly steep rise in yields between short- and intermediate-term issues

and a less pronounced rise between intermediate- and long-term issues. That is as it should be, since the longer the investor's money is at risk, the more the investor should expect to earn.



If the yield curve is said to be "steep," it means the yields on short-term securities are relatively low when compared to long-term issues. This means you can obtain significantly increased bond income (yield) by buying a longer maturity than you can with a short one, and you may wish to modify your choice of bond accordingly. On the other hand, if the yield curve is "flat," it means the difference between short- and long-term rates is relatively small. This means that the reward for extending maturities is relatively small, and many investors will choose to stay in the short end of the maturity range. When yields on short-term issues are higher than those on longer-term issues, the yield curve is said to be "inverted." This suggests that investors expect interest rates to decline. An inverted yield curve is sometimes considered to be a harbinger of recession.

As an investor, you need to know how bond market prices are directly linked to economic cycles and concerns about inflation. You may have wondered why press reports say the bond market fell after the government released positive economic news about job growth or housing starts. As a general rule, the bond market, and the overall economy, benefit from steady, sustainable growth rates. Moderate economic growth also benefits the financial strength of the municipal and corporate issuers whose bonds you may hold, making them a stronger credit.

But steep rises in economic growth can lead to inflation, which raises the costs of goods and services for everyone, leads to higher interest rates and erodes a bond's value. Ultimately, persistent and rapid economic growth will lead to rising interest rates, either through actions taken by the Federal Reserve to slow the expansion, or through market forces acting in anticipation of interest rate moves. Since rising interest rates push bond prices down, the bond market tends to react negatively to reports about strong economic growth.

Tax Status Some bonds offer special tax advantages. There is no state or local income tax on the interest from U.S. Treasury bonds, and no federal income tax on the interest from most municipal bonds, and in many cases no state or local income tax either.

Do you want income that is taxable or income that is tax-exempt? The answer depends on your income tax bracket—and the difference between what can be earned from taxable versus tax-exempt securities—not only presently but also throughout the period until your bonds mature. Your investment advisor can provide you with a chart showing how much taxable income you would need at each income tax bracket to match the return from a tax-exempt security. You may also access a yield calculator on *www.investinginbonds.com*. The decision about whether to invest in a taxable bond or a tax-exempt bond can also depend on whether you will be holding the securities in an account that is already tax-preferred or tax-deferred, such as a pension account, 401(k) or IRA.

Assessing Risk Virtually all investments have some degree of risk. When investing in bonds, it's important to remember that an investment's return is linked to its risk. The higher the return, the higher the risk. Conversely, relatively safe investments offer relatively lower returns.

HOW TO INVEST

There are several ways to invest in bonds. You can buy individual bonds, bond funds or unit investment trusts.

Individual Bonds There is an enormous variety of individual bonds to choose from. Your investment advisor can help you find a bond that matches your investment needs

and expectations. Most individual bonds are bought and sold in the over-the-counter (OTC) market, although some corporate bonds are also listed on the New York Stock Exchange. The OTC market comprises hundreds of securities firms and banks that trade bonds by phone or electronically. Some are dealers that keep an inventory of bonds and buy and sell these bonds for their own account; others act as agent and buy from or sell to other dealers in response to specific requests on behalf of customers.

If you're interested in purchasing a new bond issue, your investment advisor will provide you with the security's offering statement, or prospectus—the official document that explains the bond's terms and features, as well as risks that investors should know about before investing.

You can also buy and sell bonds which have already been issued. This is known as the secondary market. Many dealers keep inventories of a variety of outstanding (i.e., previously issued) bonds.

Bond prices normally *include* a markup, which constitutes the dealer's costs and profit. If a broker or dealer has to seek out a specific bond that is not in their inventory for a customer, a commission may be added to compensate for the costs and efforts of serving the customer's special needs. Each firm establishes its own prices, which may vary depending upon the size of the transaction, the type of bond you are purchasing and the amount of service the firm provides.

There are a number of services to help investors compare current prices of bonds. For municipal bond prices, benchmark yields are available on the Internet and in some newspapers through The Bond Market Association/Bloomberg National Municipal Yield Table. For a nominal fee, investors can obtain current interdealer prices or evaluations by subscribing to a service provided by S&P and The Bond Market Association. The number is 1.800.BOND INFO (1.800.266.3463). In addition, new rules issued by the Municipal Securities Rulemaking Board have made prices of municipal bonds that are actually trading more widely available, so the general and financial press will be readily able to supply current pricing. For U.S. Treasuries, corporates and other bonds, there are a number of Internet sites, media sources and vendors that provide current information on new issues. The Bond Market Association Web site (*www.investinginbonds.com*) provides links to multiple services providing price/yield information on all market segments. Additionally, you can compare prices for specific securities by getting bids from several dealers.

Bonds sold in the over-the-counter market are usually sold in $5,000 denominations. In the secondary market for outstanding bonds, prices are quoted as if the bond were traded in $100 increments. Thus, a bond quoted at 98 refers to a bond that is priced at $98 per $100 of face value, or at a 2% discount.

Bond Funds Bond funds offer investors another way to invest in the bond markets. Bond funds, like stock funds, offer professional selection and management of a portfolio of securities. They allow an investor to diversify risks across a broad range of issues and offer a number of other conveniences, such as the option of having interest payments either reinvested or distributed periodically.

Because a fund is actively managed, with bonds being added to and eliminated from the portfolio in response to market conditions and investor demand, bond funds do not have a specified maturity date. With "open-end" funds, you are able to buy or sell your share in the fund whenever you choose. But because the market value of bonds fluctuates, as previously described, a fund's net asset value will change from day to day, reflecting the cumulative value of the bonds in the portfolio. As a result, when you sell, the value of your investment—as reported in most daily newspapers—may be higher or lower, depending upon how the fund has performed since you purchased your share. "Closed-end" bond funds have a specific number of shares that are listed and traded on a stock exchange. Because the fund managers are less concerned about having to meet investor redemptions on any given day, their strategies can be more aggressive.

There are numerous sources of mutual fund information available, including major personal-finance magazines and the business pages of your daily newspapers. Well-known mutual fund research firms, such as Morningstar Inc. and Lipper Analytical Services, provide detailed analyses by subscription. Many libraries subscribe to these services. In addition, rating agencies also evaluate bond funds for credit and safety.

Most funds charge annual management fees averaging 1%, while some also impose initial sales charges (some up to 5%) or fees for selling shares. Because the annual management fees will lower returns, investors need to be aware of the total costs when calculating their overall expected returns. The minimum initial

investment is usually between $1,000 and $2,500, and $500 for retirement accounts.

Money Market Funds Money market funds, as the name implies, refer to pooled investments in short-term, highly liquid securities. These securities include U.S. Treasuries, municipal bonds, certificates of deposit issued by major commercial banks, and commercial paper issued by established corporations. Generally, these funds consist of securities and other instruments having maturities of three months or less. Money market funds also offer convenient liquidity, since most allow investors to withdraw their money at any time. However, money market funds are not insured or guaranteed by the U.S. government and there can be no assurance that the fund will be able to maintain a stable net asset value of $1.00 per share. The minimum initial investment is usually between $1,000 and $10,000.

Bond Unit Investment Trusts Bond unit investment trusts offer a fixed portfolio of investments in government, municipal, mortgage-backed or corporate bonds, which are professionally selected and remain constant throughout the life of the trust. The benefit of a unit trust is that you know exactly how much you

will earn while you're invested in it, because the composition of the portfolio remains stable. Also, since the unit trust is not an actively managed pool of assets, there is usually no management fee, but investors do pay a sales charge, plus a small annual fee to cover supervision, evaluation expenses and trustee fees. The minimum initial investment is usually between $1,000 and $5,000. As an investor, you can earn interest income during the life of the trust and recover your principal as securities within the trust are redeemed. The trust typically ends when the last investment matures.

FUNDAMENTAL INVESTMENT STRATEGIES

As you build your investment portfolio of fixed-income securities, there are various techniques you and your investment advisor can use to help you match your investment goals with your risk tolerance.

Diversification No matter what your investment objective, it makes good sense to diversify your portfolio. Diversification can provide some protection for your portfolio, so if one sector or asset class is in the midst of a downturn, the rising value of another class of assets may help offset the negative impact. For example, suppose your portfolio held a variety of high-yield and investment-grade bonds. You chose the high-yield securities for their greater returns. The investment-grade bonds probably generate somewhat lower yields, but their ability to weather economic downturns should offset potential credit-quality concerns which could affect the high-yield securities in the portfolio. Similarly, you might want to balance corporate issues with U.S. Treasury, municipal or mortgage-backed issues offered by government-sponsored agencies.

Laddering Another diversification strategy is to purchase securities of various maturities. When you buy bonds with a range of maturities, a technique called laddering, you are reducing your portfolio's sensitivity to interest rate risk. If, for example, you invested only in short-term securities, the kind least sensitive to changing interest rate risk, you would have a high degree of stability, but you might be giving up yield. Conversely, investing only in long-term securities may result in greater returns, but their prices will be more volatile, exposing you to losses should you have to sell before maturity.

Building a laddered portfolio involves buying an assortment of bonds with maturities distributed over time. For example, you might invest equal amounts in securities maturing in two, four, six, eight and 10 years. In two years, when the first bonds mature, you would reinvest the money in a 10-year maturity, maintaining the ladder.

Your return would be higher than if you bought only short-term issues. Your risk would be less than if you bought only long-term issues. You would be better protected against interest rate changes than with bonds of one maturity.

If interest rates fell, you'd have to reinvest the securities maturing in two years at a lower rate, but you'd have the above-market return from the other issues. If rates rose, your total portfolio would pay a below-market return, but you could start correcting that in two years or less when your shortest issue matured.

Barbell This strategy also involves investing in securities of more than one maturity to limit your risk against fluctuating prices. But instead of dividing your money in a series of bonds distributed over time, as with a laddered portfolio, you'd concentrate your holdings in bonds with maturities at both ends of the spectrum, long- and short-term—for example, bills or notes maturing in six months or a year, and 20- or 30-year bonds.

Bond Swap Investors use bond swaps to realize a variety of benefits. A swap, the simultaneous sale of one security and the purchase of another, may be done to change maturities, upgrade the credit quality of the portfolio, increase current income or achieve a number of other objectives. The most common swap is done to achieve tax savings. Anyone owning bonds selling below their purchase price and having capital gains or other income which could be partially, or fully, offset by a tax loss can benefit from a tax swap. In a two-step process, the investor would sell a bond that is worth less than what he paid for it and would simultaneously purchase a similar bond at approximately the same price. By swapping the securities, the investor has converted the paper loss to an actual loss which can be used to offset capital gains and up to $3,000 of ordinary income each year on a joint return.

Now that you know the basic concepts of investing in bonds, talk with your investment advisor about what types of bonds are most appropriate for you. He or she will be able to provide you more detailed information about each of the specific types of bonds in which you may be interested.

glossary

Accrued interest. Interest deemed to be earned on a security but not yet paid to the investor.

Ask price. Price being sought for the security by the seller.

Basis point. One one-hundredth of 1 percent. Yield differences among fixed-income securities are stated in basis points.

Bearer security. A security that has no identification as to owner. It is presumed to be owned by the person who holds it. Bearer securities are freely negotiable, since ownership can be quickly transferred from seller to buyer by delivery of the instrument. However, note that in the United States it has not been legal to issue bearer bonds in the municipal or corporate markets since 1982. As a result, the only bearer bonds available in the secondary market are long-dated maturities issued before this date, which are becoming increasingly scarce. Among the disadvantages of bearer securities are that you must clip the coupons and present them to the trustee in order to receive your interest; and if the bonds are called, you will not automatically be alerted by the issuer or trustee.

Bid. The price at which a buyer offers to purchase a security.

Bond insurers and reinsurers. A partial list of bond insurers includes American Municipal Bond Assurance Corp. (AMBAC), ACA Financial Guaranty, Asset Guaranty Insurance Co., AXA Re Finance, Capital Guaranty Insurance Co., Capital Reinsurance Co. (Capital Re), Enhance Reinsurance Co. (Enhance

Re), Financial Guaranty Insurance Co. (FGIC), Financial Security Assurance (FSA) and Municipal Bond Insurance Association (MBIA).

Bond swap. The sale of a bond and the purchase of another bond of similar market value. Swaps may be made to establish a tax loss, upgrade credit quality, extend or shorten maturity, etc.

Book-entry. A method of recording and transferring ownership of securities electronically, eliminating the need for physical certificates.

Callable bonds. Bonds which are redeemable by the issuer prior to the maturity date at a specified price at or above par.

Call premium. A dollar amount, usually stated as a percent of the principal amount called, paid by the issuer as a "penalty" for the exercise of a call provision.

Cap. The top interest rate that can be paid on a floating-rate security.

Closed-end investment company. An investment company created with a fixed number of shares which are then traded as listed securities on a stock exchange. After the initial offering, existing shares can only be bought from existing shareholders.

CMO (Collateralized Mortgage Obligation). A bond, backed by a pool of mortgage pass-through securities or mortgage loans, which generally supports several classes of obligations. (See "REMIC.")

Collar. Upper and lower limits (cap and floor, respectively) on the interest rate of a floating-rate security.

Coupon. This part of a bearer bond denotes the amount of interest due, and on what date and where payment will be made. Bearer coupons are presented to the issuer's designated paying agent for collection.

With registered bonds, physical coupons don't exist. (See "Registered bond.") The payment is mailed directly to the registered holder. Note that while bearer bonds are no longer issued in the United States and, hence, physical coupons are increasingly scarce, dealers and investors often still refer to the stated interest rate on a registered or book-entry bond as the "coupon."

Current yield. The ratio of interest to the actual market price of the bond, stated as a percentage. For example, a bond with a current market price of $1,000 that pays $80 per year in interest would have a current yield of 8%.

CUSIP. The Committee on Uniform Security Identification Procedures, established under the auspices of the American Bankers Association to develop a uniform method of identifying securities. CUSIP numbers are unique nine-digit numbers assigned to each series of securities.

Dated date (or issue date). The date of a bond issue from which the first owner of a bond is entitled to receive interest.

Default. Failure to pay principal or interest when due. Defaults can also occur for failure to meet non-payment obligations, such as reporting requirements, or when a material problem occurs for the issuer, such as a bankruptcy.

Debenture. Unsecured debt obligation, issued against the general credit of a corporation, rather than against a specific asset.

Discount. The amount by which the purchase price of a security is less than the principal amount, or par value.

Discount note. Short-term obligations issued at discount from face value, with maturities ranging from

overnight to 360 days. They have no periodic interest payments; the investor receives the note's face value at maturity.

Discount rate. The rate the Federal Reserve charges on loans to member banks.

Duration. The weighted maturity of a fixed-income investment's cash flows, used in the estimation of the price sensitivity of fixed-income securities for a given change in interest rates.

Embedded option. A provision within a bond giving either the issuer or the bondholder an option to take some action against the other party. The most common embedded option is a call option, giving the issuer the right to call, or retire, the debt before the scheduled maturity date.

Extension risk. The risk that rising interest rates will slow the anticipated rate at which mortgages or other loans in a pool will be repaid, causing investors to find that their principal is committed for a longer period than expected. As a result, they may miss the opportunity to earn a higher rate of interest on their money.

Face amount. Par value (principal or maturity value) of a security appearing on the face of the instrument.

Federal funds rate. The interest rate charged by banks on loans to other banks. The Federal Reserve's ability to add or withdraw reserves from the banking system gives it close control over this rate. Changes in the federal funds rate are sometimes studied by economists and investors for clues to Federal Reserve intentions.

Floating-rate bond. A bond for which the interest rate is adjusted periodically according to a predetermined formula, usually linked to an index.

Floor. The lower limit for the interest rate on a floating-rate bond.

General obligation bond. A municipal bond secured by the pledge of the issuer's full faith, credit and taxing power.

Hedge. An investment made with the intention of minimizing the impact of adverse movements in interest rates or securities prices.

High-yield bond. Bonds issued by lower-rated corporations, sovereign countries and other entities rated Ba or BB or below and offering a higher yield than more creditworthy securities; sometimes known as junk bonds.

Investment-grade. Bonds considered suitable for preservation of invested capital by the rating agencies and rated Baa or BBB or above.

Issuer. An entity which issues and is obligated to pay principal and interest on a debt security.

Interest. Compensation paid or to be paid for the use of money. Interest is generally expressed as a percentage rate.

Junk bond. A debt obligation with a rating of Ba or BB or lower, generally paying interest above the return on more highly rated bonds; sometimes known as high-yield bonds.

Leverage. The use of borrowed money to increase investing power.

LIBOR (London Interbank Offered Rate). The rate banks charge each other for short-term eurodollar loans. LIBOR is frequently used as the base for resetting rates on floating-rate securities.

Liquidity or Marketability. A measure of the relative ease and speed with which a security can be

purchased or sold in the secondary market at a price that is reasonably related to its actual market value.

Maturity. The date when the principal amount of a security is payable.

Mortgage pass-through. A security representing a direct interest in a pool of mortgage loans. The pass-through issuer or servicer collects payments on the loans in the pool and "passes through" the principal and interest to the security holders on a pro rata basis.

Mutual fund. Also known as an open-end investment company, to differentiate it from a closed-end investment company. Mutual funds invest pooled cash of many investors to meet the fund's stated investment objective. Mutual funds stand ready to sell and redeem their shares at any time at the fund's current net asset value: total fund assets divided by shares outstanding.

Non-callable bond. A bond that cannot be called for redemption by the issuer before its specified maturity date.

Offer. The price at which a seller will sell a security.

Offering price. The price at which members of an underwriting syndicate for a new issue will offer securities to investors.

Par value. The principal amount of a bond or note due at maturity.

Paying agent. Place where principal and interest are payable—usually a designated bank or the office of the treasurer of the issuer.

Premium. The amount by which the price of a security exceeds its principal amount.

Prepayment. The unscheduled partial or complete payment of the principal amount outstanding on a mortgage or other debt before it is due.

Prepayment risk. The risk that falling interest rates will lead to heavy prepayments of mortgage or other loans—forcing the investor to reinvest at lower prevailing rates.

Primary market. The market for new issues.

Principal. The face amount of a bond, payable at maturity.

Ratings. Designations used by credit rating agencies to give relative indications of credit quality.

Registered bond. A bond whose owner is registered with the issuer or its agent. Transfer of ownership can only be accomplished when the securities are properly endorsed by the registered owner.

Reinvestment risk. The risk that interest income or principal repayments will have to be reinvested at lower rates in a declining rate environment.

REMIC (Real Estate Mortgage Investment Conduit). Because of changes in the 1986 Tax Reform Act, most CMOs are now issued in REMIC form to create certain tax advantages for the issuer. The terms REMIC and CMO are now used interchangeably.

Revenue bond. A municipal bond payable from revenues derived from tolls, charges or rents paid by users of the facility constructed with the proceeds of the bond issue.

Secondary market. Market for issues previously offered or sold.

Settlement date. The date for the delivery of securities and payment of funds.

Sinking fund. Money set aside by an issuer of bonds on a regular basis, for the specific purpose of redeeming debt.

Sinker. A bond with a sinking fund.

Trade date. The date when the purchase or sale of a bond is transacted.

Transfer agent. A party appointed by an issuer to maintain records of securities owners, to cancel and issue certificates, and to address issues arising from lost, destroyed or stolen certificates.

Trustee. A bank designated by the issuer as the custodian of funds and official representative of bondholders.

Unit investment trust. Investment fund created with a fixed portfolio of investments that never changes over the life of the trust. As investments within the trust are paid off, they provide a steady, periodic flow of income to investors.

Yield. The annual percentage rate of return earned on a security. Yield is a function of a security's purchase price and coupon interest rate.

Yield curve. A line tracing relative yields on a type of security over a spectrum of maturities ranging from three months to 30 years.

Yield to call. A yield on a security calculated by assuming that interest payments will be paid until the call date, when the security will be redeemed at the call price.

Yield to maturity. A yield based on the assumption that the security will remain outstanding to maturity. It represents the total of coupon payments until maturity, plus interest on interest, and whatever gain or loss is realized from the security at maturity.

Zero-coupon bond. A bond on which no periodic interest payments are made. The investor receives one payment—which includes principal and interest—at redemption (call or maturity). (See "Discount note.")

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