AN INVESTOR'S GUIDE TO

CORPORATE BONDS

Investing for steady income and an attractive yield.

CONTENTS

WHAT ARE CORPORATE BONDS?

Corporate bonds (also called corporates) are debt obligations, or IOUs, issued by private and public corporations. They are typically issued in multiples of $1,000 and/or $5,000. Companies use the funds they raise from selling bonds for a variety of purposes, from building facilities to purchasing equipment to expanding the business.

When you buy a bond, you are lending money to the corporation that issued it. The corporation promises to return your money, or principal, on a specified maturity date. Until that time, it also pays you a stated rate of interest, usually semiannually. The interest payments you receive from corporate bonds are taxable. Unlike stocks, bonds do not give you an ownership interest in the issuing corporation.

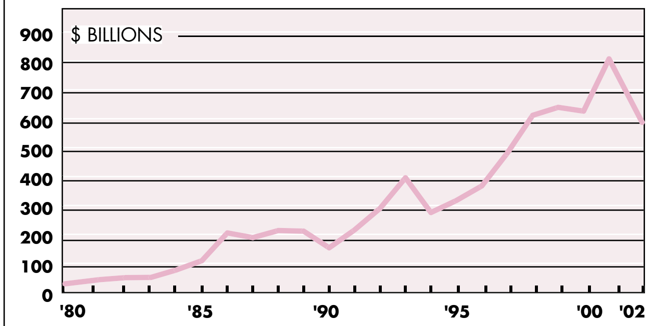
HOW BIG IS THE MARKET AND WHO BUYS?

The corporate bond market is large and liquid, with daily trading volume estimated at $23 billion. Issuance for 2002 was an estimated $594* billion. The total market value of outstanding corporate bonds in the United States at the end of 2002 was approximately $4.1 trillion.**

Most corporate bonds trade in the over-the-counter (OTC) market. This market does not exist in a central location. It is made up of bond dealers and bro-

**Thomson Financial*
***Federal Reserve Flow of Funds Accounts of the U.S.*

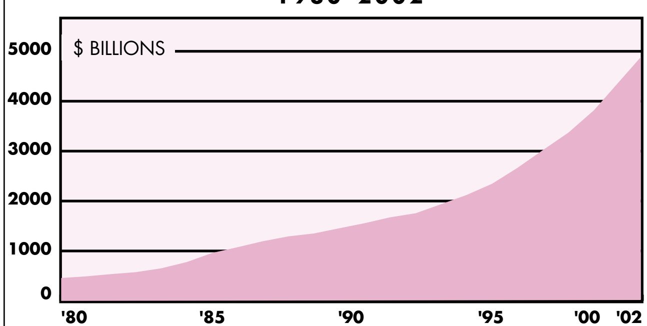
CORPORATE BOND ISSUANCE*
1980–2002



* *Includes all non-convertible debt, MTNs, and Yankee bonds, but excludes all issues with maturities of one year or less, CDs and federal agency debt.*
Source: Thomson Financial Securities Data as of 12/31/02

kers from around the country who trade debt securities over the phone or electronically. Market participants are increasingly utilizing electronic transaction systems to assist in the trade execution process. Some bonds trade in the centralized environments of the New York Stock Exchange (NYSE) and American Stock Exchange (AMEX), but the bond trading volume on the exchanges is small. The OTC market is much larger than the exchange markets, and the vast majority of bond transactions, even those involving exchange-listed issues, take place in this market.

CORPORATE BONDS OUTSTANDING
1980–2002



Sources: The Bond Market Association, Federal Reserve System As of 12/31/02

Investors in corporate bonds include large financial institutions, such as pension funds, endowments, mutual funds, insurance companies and banks. Individuals, from the very wealthy to people of modest means, also invest in corporates because of the many attractions these securities offer.

BENEFITS OF INVESTING IN CORPORATE BONDS

Investors buy corporates for a variety of reasons:

Attractive yields. Corporates usually offer higher yields than comparable-maturity government bonds or CDs. This high-yield potential is generally accompanied by higher risks.

Dependable income. People who want steady income from their investments, while preserving their principal, include corporates in their portfolios.

Safety. Corporate bonds are evaluated and assigned a rating based on credit history and ability to repay obligations. The higher the rating, the safer the investment. (See “Understanding Credit Risk,” on page 13.)

Diversity. Corporate bonds provide the opportunity to choose from a variety of sectors, structures and credit-quality characteristics to meet your investment objectives.

Marketability. If you must sell a bond before maturity, in most instances you can do so easily and quickly because of the size and liquidity of the market. (See “Marketability,” on page 19.)

TYPES OF ISSUERS

There are five main classifications of issuers representing various sectors that issue corporate bonds: (1) public utilities; (2) transportation companies; (3) industrial corporations; (4) financial services companies; and (5) conglomerates. Such issuers may be U.S. companies or foreign companies. Foreign governments are also frequent issuers in the U.S. markets.

BASIC TERMS OF BONDS

Maturity

One of the key investment features of any bond is its maturity. A bond's maturity tells you when you should expect to get your principal back and how long you can expect to receive interest payments. (However, some corporates have "call," or redemption, features that can affect the date when your principal is returned. See "Understanding 'Call' and Refunding Risk," on page 8.)

Corporate bonds, in general, are divided into three groups:

Short-term notes	Maturities of up to 5 years
Medium-term notes/bonds	Maturities of 5–12 years
Long-term bonds	Maturities greater than 12 years

Structure

Another important fact to know about a bond before you buy is its structure. With traditional debt securities, the investor lends the issuer a specified amount

of money for a specified time. In exchange, the investor receives fixed payments *of interest* on a regular schedule for the life of the bonds, with the full principal returned at maturity. In recent years, however, the standard, fixed interest rate has been joined by other varieties. The three types of rates you are most likely to be offered are these:

Fixed-rate. Most bonds are still the traditional fixed-rate securities described above.

Floating-rate. These are bonds that have variable interest rates that are adjusted periodically according to an index tied to short-term Treasury bills or money markets. While such bonds offer protection against increases in interest rates, their yields are typically lower than those of fixed-rate securities with the same maturity. (See below, "Understanding Interest-Rate Risk.")

Zero-coupon. These are bonds that have no periodic interest payments. Instead, they are sold at a deep discount to face value and redeemed for the full face value at maturity. (One point to keep in mind: Even though you receive no cash interest payments, you must pay income tax on the interest accrued each year on most zero-coupon bonds. For this reason, zeros may be most suitable for IRAs and other tax-sheltered retirement accounts. Other tax aspects of zeros are discussed under "How Corporate Bonds Are Taxed — Original-Issue Discount," on page 17.)

UNDERSTANDING INTEREST-RATE RISK

Like all bonds, corporates tend to rise in value when interest rates fall, and they fall in value when interest rates rise. Usually, the longer the maturity, the greater the degree of price volatility. By holding a bond until maturity, you may be less concerned about these price fluctuations (which are known as interest-rate risk, or market risk), because you will receive the par, or face, value of your bond at maturity.

Some investors are confused by the inverse relationship between bonds and interest rates — that is, the fact that bonds are worth less when interest rates rise. But the explanation is essentially straightforward:

- When interest rates rise, new issues come to market with higher yields than older securities, making those older ones worth less. Hence, their prices go down.
- When interest rates decline, new bond issues come to market with lower yields than older securities, making those older, higher-yielding ones worth more. Hence, their prices go up.

As a result, if you have to sell your bond before maturity, it may be worth more or less than you paid for it.

Various economic forces affect the level and direction of interest rates in the economy. Interest rates typically climb when the economy is growing, and fall during economic downturns. Similarly, rising inflation leads to rising interest rates (although at some point, higher rates themselves become contributors to higher inflation), and moderating inflation leads to lower interest rates. Inflation is one of the most influential forces on interest rates.

UNDERSTANDING YIELDS

Yield is a critical concept in bond investing, because it is the tool you use to measure the return of one bond against another. It enables you to make informed decisions about which bond to buy.

In essence, yield is the rate of return on your bond investment. However, it is not fixed, like a bond's stated interest rate. It changes to reflect the price movements in a bond caused by fluctuating interest rates.

Here is an example of how yield works: You buy a bond, hold it for a year while interest rates are rising and then sell it. You receive a lower price for the bond than you paid for it because, as indicated above under "Understanding Interest-Rate Risk," no one would otherwise accept your bond's now lower-than-market interest rate. Although the buyer will receive the same dollar amount of interest you did and will have the same amount of principal returned at maturity, the buyer's yield, or rate of return, will be higher than yours was — because the buyer paid less for the bond.

There are numerous ways of measuring yield, but two — current yield and yield to maturity — are of greatest importance to most investors.

Current yield

The current yield is the annual return on the dollar amount paid for a bond, regardless of its maturity. If you buy a bond at par, the current yield equals its stated interest rate. Thus, the current yield on a par-value bond paying 6% is 6%.

However, if the market price of the bond is more or less than par, the current yield will be different. For example, if you buy a $1,000 bond with a 6%

stated interest rate after prevailing interest rates have risen above that level, you would pay less than par. Assume your price is $900. The current yield would be 6.67% ($1,000 x .06/$900).

Yield to maturity

A more meaningful figure is the yield to maturity, because it tells you the total return you will receive if you hold a bond until maturity. It also enables you to compare bonds with different maturities and coupons. Yield to maturity includes all your interest plus any capital gain you will realize (if you purchase the bond below par) or minus any capital loss you will suffer (if you purchase the bond above par).

Ask your Financial Consultant to provide you with the precise yield to maturity of any bond you are considering. Don't buy on the basis of the current yield alone, because it may not represent the bond's real value *to you*.

Yield to call

The yield to call tells you the total return you will receive if you were to buy and hold the security until the call date. As an investor, you should be aware that this yield is valid only if the bond is called prior to maturity. The calculation of yield to call is based on the coupon rate, the length of time to the call date, and the market price of the bond. (see Understanding "Call" and Refunding Risk, below.)

UNDERSTANDING "CALL" AND REFUNDING RISK

One of the most difficult risks for investors to understand is that posed by "call" and refunding

provisions. If the bond's indenture (the legal document that spells out its terms and conditions) contains a "call" provision, the issuer retains the right to retire (that is, redeem) the debt, fully or partially, before the scheduled maturity date. For the issuer, the chief benefit of such a feature is that it permits the issuer to replace outstanding debt with a lower-interest-cost new issue.

A call feature creates uncertainty as to whether the bond will remain outstanding until its maturity date. Investors risk losing a bond paying a higher rate of interest when rates have declined and issuers decide to call in their bonds. When a bond is called, the investor must usually reinvest in securities with lower yields. Calls also tend to limit the appreciation in a bond's price that could be expected when interest rates start to slip.

Because a call feature puts the investor at a disadvantage, callable bonds carry higher yields than noncallable bonds, but higher yield alone is often not enough to induce investors to buy them. As further inducement, the issuer often sets the call price (the price investors must be paid if their bonds are called) higher than the principal (face) value of the issue. The difference between the call price and principal is the call premium.

Generally, bondholders do have some protection against calls. An example would be a bond that has a 15-year final maturity, noncall two years. This means the investor is protected from a call for two years, after which time the issuer has the right to call the bonds.

Sinking-fund provisions

A sinking fund is money taken from a corporation's earnings that is used to redeem bonds periodically, before maturity, as specified in the indenture. If a bond issue has a sinking-fund provision, a certain portion of the issue must be retired each year. The bonds retired are usually selected by lottery.

One investor benefit of a sinking fund is that it lowers the risk of default by reducing the amount of the corporation's outstanding debt over time. Another is that the fund provides price support to the issue, particularly in a period of rising interest rates. However, the disadvantage — which usually weighs more heavily on investors' minds, especially in a falling-rate environment — is that bondholders may receive a sinking-fund call at a price (often par) that may be lower than the current market price of the bonds.

Other types of redemptions

Bond investors should be aware of the possibility of certain other kinds of calls. Some bonds, especially utility securities, may be called under what are known as *Maintenance and Replacement* fund provisions (which relate to upgrading plant and equipment). Others may be called under *Release and Substitution* clauses (which are designed to maintain the integrity of assets pledged as collateral for some bonds) and *Eminent Domain* clauses (which have to do with paying off bonds when a governmental body confiscates or otherwise takes assets of the issuer). Ask about these and any other special redemption provisions that may apply to bonds you are considering.

You can avoid the complications and uncertainties of calls altogether by buying only noncallable bonds without sinking-fund provisions. If you do buy a callable bond and it is called, be aware that its actual yield will be different than the yield to maturity you were quoted. So ask your Financial Consultant to tell you what the yield to call is as well.

Puts

Just as some issuers have the right to call your bond prior to maturity, there is a type of bond — known as a put bond — that is redeemable at *your* option prior to maturity. At specified intervals, you may "put" the bond back to the issuer for full face value plus accrued interest. In exchange for this privilege, you will have to accept a somewhat lower yield than a comparable bond without a put feature would pay.

UNDERSTANDING COLLATERALIZATION

In the event a corporation goes out of business or defaults on its debt, bondholders, as creditors, have priority over stockholders in bankruptcy court. However, the order of priority among all the vying groups of creditors depends on the specific terms of each bond, among other factors.

One of the most important factors is whether the bond is secured or unsecured. If a bond is secured, the issuer has pledged specific assets (known as collateral) that can be sold, if necessary, to pay the bondholders. If you buy a secured bond, you will "pay" for the extra safety by receiving a lower interest rate than you would have received on a comparable unsecured bond.

Debenture bonds

Most corporate bonds are debentures — that is, unsecured debt obligations backed only by the issuer's general credit and the capacity of its cash flow to repay interest and principal. However, even unsecured bonds usually have the protection of what is known as a negative pledge provision. This requires the issuer to provide security for the unsecured bonds in the event that it subsequently pledges its assets to secure other debt obligations.

Credit ratings (discussed under "Understanding Credit Risk," on page 13) are a key tool for the investor who wants to know how strong a company's unsecured bonds are.

Mortgage bonds

These are bonds for which real estate or other physical property has been pledged as collateral. They are mostly issued by public utilities.

There are various kinds of mortgage bonds, including the following: first, prior, overlying, junior, second, third and so on. The designation reflects the priority of the lien, or legal claim, you have against the specified property. Any time you invest in mortgage bonds, you should find out how much other debt of the issuer is secured by the same collateral and whether the lien supporting that other debt is equal or prior to your bond's lien.

Collateral trust bonds

A corporation may deposit stocks, bonds and other securities with a trustee to back its bonds. The collateral must have a market value at the time of issuance at least equal to the value of the bonds.

Equipment trust certificates

Railroads and airlines have issued this type of bond as a way to pay for new equipment at relatively low interest rates. The title to the equipment is held by a trustee until the loan is paid off, and the investors who buy the certificates usually have a first claim on the equipment.

Subordinated debentures

Debt that is subordinated, or junior, has a priority lower than that of other debt in terms of payment (but like all bonds, it ranks ahead of stock). Only after secured bonds and debentures are paid off can holders of subordinated debentures be paid. In exchange for this lower status in the event of bankruptcy, investors in subordinated securities earn a higher rate of interest than is paid on senior securities.

Guaranteed bonds

Another form of security is a guarantee of one corporation's bonds by another corporation. For example, bonds issued by a subsidiary may be guaranteed by the parent corporation. Or bonds issued by a joint venture between two companies may be guaranteed by both parent corporations. Guaranteed bonds become, in effect, debentures of the guaranteeing corporation and benefit from its presumably better credit.

UNDERSTANDING CREDIT RISK

Credit ratings

A bond issuer's ability to pay its debts — that is, make all interest and principal payments in full and on schedule — is a critical concern for investors. Most corporate bonds are evaluated for credit quality by Standard & Poor's, Moody's Investors Service and Fitch Ratings. (See their rating systems in the chart on page 14.) Checking a bond's rating before buying is not only smart but also simple: Just ask your Financial Consultant.

Bonds rated BBB or higher by Standard & Poor's and Fitch Ratings, and Baa or higher by Moody's, are widely considered "investment grade." This means the quality of the securities is high enough for a prudent investor to purchase them.

CREDIT RATINGS

Credit Risk	Moody's	Standard & Poor's	Fitch Ratings
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			
Lower medium grade (somewhat speculative)	Ba	BB	BB
Low grade (speculative)	B	B	B
Poor quality (may default)	Caa	CCC	CCC
Most speculative	Ca	CC	CC
No interest being paid or bankruptcy petition filed	C	C	C
In default	C	D	D

Some bonds are not rated, but this does not necessarily mean they are unsafe. Before buying such a security, however, ask your Financial Consultant for other evidence of its quality.

High-yield bonds

Bonds with a rating of BB (Standard & Poor's, Fitch Ratings) or Ba (Moody's) or below are speculative investments. They are called high-yield, or junk, bonds. Such bonds are issued by newer or start-up companies, companies that have had financial problems, companies in a particularly competitive or volatile market and those featuring aggressive financial and business policies. They pay higher interest rates than investment-grade bonds to compensate for the extra risk. (However, if they were issued before the company's financial difficulties, the risk may not be offset by a higher yield.)

For those who do not mind taking substantial risk, such securities can provide exceptional returns. For the less adventurous who still want to participate in this market, high-yield bond mutual funds are a way to spread the risk over many issues.

Event risk

In recent years, the managements of many corporations have tried to boost shareholder value by undertaking leveraged buyouts, restructurings, mergers and recapitalizations. Such events can push bond values down, sometimes very suddenly, because they may greatly increase a company's debt load. Although some corporations have now established bondholder protections, these are neither widespread nor foolproof. All bonds are subject to this potential risk. An individual investor should see if the rating agencies have written commentaries on a company's vulnerability to event risk before buying its bonds.

BOND FUNDS

Many investors who want to reap the good returns available in the corporate bond market buy shares in bond mutual funds instead of individual bonds — or in addition to individual bonds. They do so for the same reasons investors have flocked to mutual funds of all kinds in recent years — diversification, professional management, modest minimum investments, automatic dividend reinvestment and other convenience features.

Diversification is an especially important advantage of bond funds. Many investors in individual bonds buy only a few securities, thus concentrating their risk. A fund manager, by contrast, spreads credit risk, interest-rate risk and, indeed, all other kinds of risk, over many bonds. Different issuers, sectors, credit ratings, coupons and maturities are all represented in a diversified portfolio.

However, lower risk does not mean no risk. All the underlying risks that affect bonds affect bond funds — but not as sharply. You should be aware that prices of bond fund shares fluctuate inversely with interest rates, just as individual bonds' prices do, and when you sell fund shares, they may be worth more or less than you paid for them.

HOW CORPORATE BONDS ARE TAXED

The following basic information addresses the tax aspects for individuals of investing in corporate bonds. For advice about your specific situation, you should consult your tax adviser.

Interest

The interest you receive from corporate bonds is subject to federal and state income tax. (If you own shares in bond mutual funds, your interest income will come to you in the form of "dividends" from the fund, but these are fully taxable and are not eligible for the maximum 15% tax rate that otherwise applies to dividends.)

Gains and losses

You may generate capital gains on a corporate bond if you sell it at a profit before it matures. If you sell it up to a year from purchase, the gains are taxed at your ordinary rate. If you sell it more than a year from purchase, your capital gains are considered long-term and are currently taxed at a maximum rate of 15%.

Conversely, if you sell a bond for less than you paid, you may incur a capital loss. You may offset an unlimited amount of such losses dollar for dollar against capital gains you have realized on other investments (bonds, stocks, mutual funds, real estate, etc.). If your losses exceed your gains, you may currently deduct up to $3,000 of net capital losses annually from your ordinary income. Any capital losses in excess of $3,000 are carried forward and can be used in future years. (These rules apply to the sale of shares in bond funds as well as to individual bonds.)

Original-issue discount

When bonds are issued at substantially less than par (face) value, the difference between the face amount and the initial offering price is known as original-issue discount. Zero-coupon bonds (discussed on page 5) are the best-known variety of this category of bonds.

The tax treatment of original-issue-discount bonds is particularly complicated, so if you plan to invest in them, it is essential to consult your tax attorney or adviser. During the time you own original-issue-discount bonds, you will pay tax each year on a portion of the discount (even though you do not receive it in cash). However, if you hold them to maturity, you do not pay capital gains or other taxes on the amount by which the face value you receive exceeds the discounted amount you paid for the bonds. The reason is that you paid taxes on that excess incrementally each year that you held the bonds.

OTHER BASIC FACTS

Interest payments

Corporate bond interest is usually paid semiannually. Zero-coupon bonds pay no periodic interest.

Forms of issuance

Corporate bonds are issued in several forms:

- **Registered bonds.** Some corporate bonds are issued as certificates, with the owner's name printed on them. There are no coupons attached for the owner to submit for payment of interest. The issuer's agent or trustee sends the interest to the bondholder at the proper intervals and forwards the principal at maturity.
- **Bearer bonds.** These are bonds that have no name printed on them and do have coupons attached. Anonymous and highly negotiable, bearer bonds are virtually equivalent to cash. The Tax Reform Act of 1982 ended the issuance of such bonds, but many remain in circulation.
- **Book-entry bonds.** These are bonds without certificates. Just as registered bonds have largely supplanted bearer bonds, book entry is replacing certificates as the prevailing form of issuance. With book-entry securities, a bond issue has only one master, or global, certificate, which is kept at a securities depository. The ownership of book-entry bonds is recorded in the investor's brokerage account. All interest and principal payments are forwarded to the brokerage account.

Minimum investment

For OTC bonds, the minimum investment is usually $5,000. Listed bonds are issued and sold in $1,000 denominations.

Payment terms

When you buy a corporate bond (or other security), you must make sure that payment arrives at the broker's office within three business days. Some brokers require that you have your payment on deposit before they will execute your purchase. If you sell a bond, you will receive the broker's payment in approximately three business days.

Sources of information

If you are interested in a new or proposed bond offering, ask your broker for a prospectus, the official offering statement the issuer must file with the Securities and Exchange Commission. Detailed information on new bond issues is provided as well by two of the rating agencies in their weekly publications — *Moody's Credit Perspectives* and *Standard & Poor's Credit Week*. These two companies also publish information on existing bond issues. Check the *Mergent Bond Record* and *Moody's Manuals,* or *Standard & Poor's Bond Guide* and *Standard & Poor's Corporation Records*. Most brokerage offices have these publications, as do many libraries.

Marketability

How quickly and easily a particular bond can be bought or sold determines its marketability. To the extent the term "marketability" is used interchangeably with "liquidity," it also implies that the price of the security will not change much under normal market conditions. In general, for a bond to enjoy high marketability, there must be a large trading volume and a large number of dealers in the security.

Costs

Brokers often sell bonds from their firms' inventory, in which case investors do not pay an outright commission. Rather, they pay a markup that is built into the price quoted for the bond. If a broker has to go out into the market to find a particular bond for a customer, a commission may be charged. Each brokerage firm establishes its own markups and commissions, which may vary depending on the size of the transaction and the type of bond you are purchasing.

GLOSSARY

Collateral. Assets pledged by a borrower to secure repayment of a loan or bond.

Coupon. A bond's stated interest rate.

Default. A borrower's failure to make timely payments of interest and principal when due or to meet other requirements related to the bonds, such as maintenance of collateral or financial covenants.

Face value. The value that appears on the front, or face, of a bond, which represents the amount the issuer promises to repay at maturity. Also known as **par** or **principal amount**.

Interest. Compensation paid or to be paid for the use of money, generally expressed as an annual percentage rate. The rate may be constant over the life of the bond (fixed-rate) or may change from time to time by reference to an index (floating-rate).

Liquidity. Capacity of a market to absorb a reasonable level of selling without significant losses.

Maturity. The date when the principal amount of a bond becomes due and payable.

Security. Collateral pledged by a bond issuer (debtor) to an investor (lender) to secure repayment of the loan.

Volatility. The propensity of a security's price to rise or fall sharply.

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