

Bond Basics For Individuals: A Guide to Buying and Selling

By Annette Thau

While people speak of the bond market as if it were one market, in reality there is not one central place or exchange where bonds are bought and sold. Rather, the bond market is a gigantic over-the-counter market, consisting of networks of independent dealers, organized by type of security, with some overlaps. Whereas stocks sell ultimately in one of three independent exchanges, most bonds are sold dealer to dealer.

This market is so vast that its size is difficult to imagine. Overwhelmingly, this is an institutional market. It raises debt capital for the largest issuers of debt, such as the U.S. government, state and local governments, and the largest corporations. The buyers of that debt are primarily large institutional investors such as pension funds, insurance companies, banks, corporations, and, increasingly, mutual funds. These buyers and sellers routinely trade sums that appear almost unreal to a non-finance professional. U.S. government bonds trade in blocks of \$1 million, and \$100 million trades are routine. The smallest blocks are traded in the municipal market, where a round lot is \$100,000. Another way of characterizing this market is to call it a wholesale market.

Enter the individual investor. In the bond markets, individual investors, even those with considerable wealth, are all little guys, who are trying to navigate a market dominated by far larger traders. Indeed, many of the new fixed-income securities created over the last 10 years were specifically tailored to the needs of pension funds or insurance companies and may not be appropriate for individual investors.

The individual investor faces many disadvantages when compared to institutions. In order to protect your own interests, if you want to buy individual bonds, you need to become an informed investor, and you need to stick to bonds whose characteristics and risks you understand.

Pricing and Commissions

Individuals may purchase bonds from a number of sources, such as full-service brokerage firms, banks or firms that specialize in debt instruments, and discount brokers. U.S. Treasuries may also be bought directly from the Federal Reserve Bank.

However, bonds trade quite differently from stocks. First, the availability of bonds varies from dealer to dealer. If you want to buy a specific type of bond (say, an intermediate muni with a rating of A or better), you cannot just assume that you can buy that bond from any dealer. Instead, you may have to approach several dealers before you find one who has what you want. Discount brokers generally do not maintain inventories. If you want to buy a certain type of bond, their traders have to buy it from another dealer; if you want to sell the bond, their traders ask for bids from other dealers. The best sources for individual bonds tend to be larger broker-dealer firms or firms that specialize in selling bonds to individual investors. These firms typically maintain inventories of bonds. They may also be able to obtain desirable new issues, whereas smaller firms may not.

Pricing also varies from dealer to dealer. Dealers mark up their bonds independently. The markup depends on their own cost, the size of the order, and how much profit they want to earn. Commissions costs, moreover, are hidden, so that the buyer does not know either the cost to the dealer or the size of the markup. Basically, buying a bond is analogous to buying a stock without knowing either the size of the

commission or the price on which the commission is based. When you shop for that A-rated intermediate muni, you are likely to be offered a variety of bonds with different yields and prices by different dealers.

Pricing information has been difficult to obtain and that continues to be true. The large bond dealers consider pricing information to be proprietary, and they have resisted efforts to make pricing information more widely available. The financial press publishes some pricing information, but it is limited. The tables that appear in the financial newspapers list a few representative widely traded issues. Most of the prices apply to institutional-size trades on \$1 million or more. If you want to either buy or sell smaller-size lots (that is, fewer bonds), the price per bond will be higher if you buy, lower if you sell.

Two additional factors further muddy bond pricing. With the exception of Treasuries, many bonds trade infrequently. If a bond has not traded for months, there is obviously no current valid pricing on it. Furthermore, the bond market includes millions of issues of all types, sizes, maturity dates, and credit quality. The same bond may be sold by different dealers for widely different prices, based on the price at which they bought the bond, the size of their markup, the size of the lot, and the direction of interest rates—and these are only a few of the relevant factors.

Finding a Good Broker

Finding a good source for bonds requires effort. Try to locate either a firm that specializes in bonds or, within a bank or brokerage firm, an individual who specializes in selling particular types of bonds to individual investors. Take the trouble to interview brokers and discuss your needs with them.

Also, be aware that there is nothing wrong with bargaining—for example, asking the broker if she can do a little better. To a broker, a smaller commission is better than no sale. Commissions in the bond market are often negotiable. Even if you have always done business with a particular firm (or a particular broker), it pays to shop around and be as well informed about market conditions as possible. You are more likely to negotiate a better price if your broker realizes that you are shopping around.

You can judge the quality of a firm partly by what that firm tries to sell you. If you tell a broker that stability of a principal is important to you, and you are consistently offered only high-yielding—and therefore risky—securities, go elsewhere.

Certain firms, referred to unceremoniously as "bucket shops," are known for their high-pressure tactics. Such firms rely on cold-calling, that is, telephoning strangers in order to spot buyers who will buy without investigating carefully. Typically, the cold caller will tell you that he is offering you a unique opportunity to buy a terrific bond, but that if you do not purchase this bond immediately, the opportunity will disappear. Never buy anything over the phone from a person or a firm that you do not know well or without comparing prices with several dealers.

Bond Trading Terms

There are a number of terms unique to the bond market that you need to become familiar with if you are trading individual bonds.

Par, Premium, and Discount: The "par" value of a bond is its value at maturity; that is, \$1,000. When a bond begins to trade, it normally ceases to sell at par. If it sells at less than par (less than \$1,000), it is said to be selling at a "discount." If it sells at more than par (above \$1,000), it is called a "premium" bond.

CUSIP Numbers: The CUSIP numbering system was established in 1967 in order to provide a uniform method for identifying bonds. (CUSIP stands for Committee on Uniform Securities Identification Procedures.) This is a nine-digit number that identifies individual bonds. It is equivalent to a ticker symbol for a stock, and it identifies each bond issue precisely. Suppose, for example, you own a State of New Jersey bond. That bond is only one of perhaps hundreds of State of New Jersey bonds that are outstanding at any given time. Each one of these bonds has very precise and individual provisions. These bonds are not interchangeable. If you want to buy or sell a bond, the CUSIP number identifies the precise issue you are dealing with.

CUSIP numbers are assigned to municipal, corporate, and pass-through securities. International issues are identified by a CINS number.

Bid, Ask, and Spread: Commission costs for buying or selling bonds are hidden. The price is quoted net. Indeed, if you ask a broker about the commission, you may be told that there is no commission. But that is not the case.

Prices of all fixed-income instruments—including mutual funds—are always quoted in pairs: the "bid" and the "ask" (also known as the offer). The difference between the bid and the ask is known as the "spread." It represents the commission. Technically, the bid is what you sell for; the ask, the price at which you buy. But it is not difficult to remember which is which. Just remember this: If you want to buy, you always pay the higher price; if you want to sell, you receive the lower.

For example, a bond may be quoted at "98 bid/100ask." If you are buying the bond, you will pay 100; if you are selling, you will receive 98 (see below for the answer to 98 and 100 what).

Technically, the bid/ask spread is a market spread, which means that it is the cost of buying or selling for the broker. A broker starts with the market spread and figures out how much additional commission she needs to charge in order to sell a bond to you at a profit. Suppose, for example, that the market spread is "98 bid/100 ask." If you are selling an actively traded bond (and that description applies to most bonds), then the broker makes sure that she buys it from you cheaply enough so that she will not lose money when she resells. She might then quote a spread to you of "97 bid/101 ask." For that reason, commission costs to an individual investor are often wider than the market bid/ask spread.

For an individual investor, commission costs typically range from $\frac{1}{2}$ of 1% (or even less) for actively traded Treasury issues, to as much as 4% in actively traded bonds. Commissions vary for many reasons:

- The dealer's cost and his markup,
- The type of bond being sold (Treasury, municipal, mortgage-backed, or corporate),
- The amount of the bond being traded (that is, the size of the lot),
- The bond's maturity,
- The bond's credit quality,
- The overall direction of interest rates,

- Demand for a specific bond, and
- Demand for a particular bond sector.

As a rule, bonds that have very low risk have narrower (that is, lower) commissions (spreads); bonds that are riskier or less in demand sell at wider (that is, higher) spreads. Any characteristic that makes a bond less desirable makes it more expensive to sell.

Let's illustrate with some concrete examples. Treasury bonds sell at the narrowest spreads (less than $\frac{1}{2}\%$ or even less), no matter how many bonds or the direction of interest rates. High-quality intermediate munis (AA or AAA, maturing between three and seven years) sell at commissions of between $\frac{3}{4}\%$ to perhaps 2%. Thirty-year munis sell at spreads of between 3% and 4%. The more strikes against a bond, the more difficult it is to sell. Trying to sell a long maturity, low credit quality bond in a weak market is a worst-case scenario because you have to shop extensively just to get a bid.

The size of the spread (or commission) reflects what is known as a bond's liquidity; that is, the ease and cost of trading a particular bond. A narrow spread indicates high demand and low risk: the dealer is sure she can resell quickly. Conversely, a wide spread indicates an unwillingness on the part of the dealer to own a bond without a substantial price cushion.

An unusually wide commission (4% or more) constitutes a red flag. It warns you that at best, a particular bond may be expensive to resell and, at worst, headed for difficult times. The dealer community, which earns its living buying and selling bonds, has a very active information and rumor network that is sometimes quicker to spot potential trouble than the credit rating agencies.

Note also that when you buy a bond issue, even though the commission is built into the deal, commission costs are usually closer to the actual market price for that bond, at a point in time, than when bonds trade in the secondary market. Hence, the individual investor may receive a fairer shake by buying at issue than by buying in the secondary market.

As already noted, it is difficult to obtain information on spreads and pricing. Dealers are reluctant to reveal markups. And pricing is variable. It bears repeating that the only way to protect yourself is to comparison shop and to do some arithmetic.

Always try to find out the bid/ask spread when you are buying a bond. If the broker does not directly quote the spread, ask what you could resell the bond for if you had to resell it that afternoon (or the next day).

Bond Talk: When the broker "shows" you a bond (that is the term generally used), she will say something like "I want to show you this great bond we just got in. It is the State of Bliss $7\frac{1}{4}$ of 05, and it is priced at 96 bid and 97 ask." Well, what did she say?

Actually, that statement is easily decoded. Bonds are always identified by several pieces of information; namely, the issuer (State of Bliss); the coupon ($7\frac{1}{4}$); the maturity date, of "05"; and the price, quoted as 97.

Let us examine each of those details more closely. First, the coupon. Coupons are always quoted in percentages. That percentage is set at issue and is therefore a percentage of par. The percentage value, however, is immediately translated into a fixed dollar amount, and that amount remains the same throughout

the life of the bond, no matter what happens to the price of the bond. In the previous example, the 7¼ coupon represents 7¼% of \$1,000, that is, \$72.50. Unless stipulated otherwise, coupons are paid semiannually. You will receive half of that amount, that is, \$36.25, twice a year, for as long as the bond remains outstanding. (Floating-rate bonds vary from this pattern. For floating-rate bonds, coupon rates are reset at predetermined intervals.)

The maturity date is designated by the last two digits, in this instance, 05. This has to be 2005. Note that with few exceptions, bonds are not issued with maturities above 30 years.

Finally, the price was quoted as 97. Bond prices are quoted in percentages, and again, percentages of par. So the quote of 97 should be interpreted as 97% (or 0.97) times \$1,000, which equals \$970. To compute price, add a zero to the percentage quote.

You can now translate what the bond broker is telling you. She would like to sell you a State of Bliss bond, maturing in 2005, with a coupon of \$72.50, at a price of \$970.

Accrued Interest: Let us suppose you decide to buy the State of Bliss bonds. When you receive your confirmation notice, it is probable that the price will turn out to be somewhat higher than the \$970 that you were quoted. No, the broker is not ripping you off. The difference between the price that you pay and the \$970 that you were quoted is "accrued interest." Let's explain.

You will remember that interest payments are made twice a year. But actually, bonds earn (the Wall Street word is "accrue") interest every single day. The owner of a bond earns or accrues interest for the exact number of days that he owns the bond.

Now suppose you are buying the State of Bliss bonds three months after the last coupon payment was made (and, therefore, three months before the next interest payment occurs). In three months, you will receive an interest payment for the past six months; but you will have earned that interest for only three months. The gentlemanly thing to do is to turn over three months' worth of interest to the previous owner.

In fact, that is what you do when you buy the bond—only you do not have any choice in the matter. The three months' interest due to the previous owner is automatically added on to the purchase price. The buyer pays the seller the accrued interest. When you (the buyer) receive the next coupon payment, the interest you receive will cover the three months' worth of interest you earned and the three months of interest that you paid the previous owner.

Accrued interest is easily computed. For bond pricing purposes, for many bonds (but not for notes), the year has 360 days. To compute accrued interest, divide the annual coupon by 360 days and multiply the result by the number of days accrued interest is owed. Add accrued interest to the purchase price. The day count varies somewhat, depending on the type of bond.

Accrued interest is paid on par, premium, and discount bonds. The amount of accrued interest depends entirely on the coupon, divided by the number of days interest is owed. It has nothing to do with the price.

Call Risk: Call risk is the risk that bonds will be redeemed ("called") by the issuer before they mature. Municipal and corporate bonds are subject to call; Treasuries generally are not. Some older 30-year

Treasuries may be callable five years before they mature, but the Treasury no longer issues any callable bonds.

The ability to call bonds protects issuers by enabling them to retire bonds with high coupons and refinance at lower interest rates. Calls are usually bad news for bondholders. A call reduces total return because bonds are called when interest rates are lower than the coupon interest of the bond that is being called. A high interest rate, thought to be "locked in," disappears, and the bondholder is forced to reinvest at lower rates.

If a bond was purchased at par, there is no loss of principal. But if it was purchased at a premium (say for \$1,200), an unexpected early call can result in a substantial loss of principal, since bonds are typically redeemed at or close to par. If the \$1,200 bond is redeemed at par, then that translates into a \$200 loss per bond.

The prospectus spells out call provisions by stipulating both specific call dates and call prices, which are typically somewhat above par. Call provisions differ, depending on the type of bond you are buying. Call provisions for corporates can be obscure. Mortgage-backed securities do not have stipulated call dates, but prepayments constitute a type of call risk.

Never buy a bond without specifically inquiring about the call provisions for that particular bond.

When a bond is offered, the broker should quote not only the yield-to-maturity, but also the yield to the earliest call date (appropriately known as the yield-to-call). Brokers usually quote the yield-to-call for munis, but seldom for corporates. If the coupon rate is a lot higher than the current interest rate in similar bonds, it is prudent to assume that the bond will be called and to evaluate the bond based on the yield-to-call. If, for example, a broker offers you a bond with an 8% coupon, maturing in 10 years, callable in one year, and interest rates are now at 6% for similar maturities, you should assume the bond will be called.

Let us note in passing another term that has come into use as an alternate to yield-to-call: yield-to-worst. That is the lowest yield that a bond would earn, under some provision in the indenture, whether that is a call, or a sinking fund provision or even the yield-to-maturity. If you are buying a bond, always inquire about yield-to-worst.

How can you protect yourself against calls?

- First, check all provisions carefully whenever you are buying munis or corporate bonds.
- Be particularly careful in checking call provisions if you are purchasing premium bonds; that is, bonds whose price is well above par.
- Buy deeply discounted bonds; that is, bonds with very low coupons selling well below par. They are much less likely to be called than high coupon bonds. Remember that the coupon represents the cost of money to the issuer. The issuer is therefore most likely to call the bonds with the largest coupons rather than those with lower coupons.

The Form of a Bond: Certificate, Registered, and Book-Entry: If you bought a muni bond before 1980, you received as proof of ownership an ornate document with coupons attached at the side. This document was known as a "certificate." The certificate did not have your name on it. To collect interest, it was necessary to

physically clip the coupons and to send them to the trustee, who would then mail you the interest payment. (That is the origin of the term "coupon.") The certificate functioned like a dollar bill. It was presumed to be owned by the bearer. Those bonds were also known as "bearer bonds."

In the early 1980s, certificates began to be issued with the name of the owner imprinted on the certificate. These are called "registered" bonds. Interest payments are sent automatically to the owner of record.

With the spread of computerization, the process has become even more automated. Many bonds are now issued in "book-entry" form. No certificates are issued. Instead, when you buy a bond, you receive a confirmation statement with a number on it. That number is stored in a computer data bank and is the only proof of ownership. Coupon payments are wired automatically to the checking or bank account that the owner designates. Notification of calls is automatic.

Most bonds are now issued in book-entry form. Older bonds are still available in bearer form, but the supply is diminishing as these bonds mature.

You may hold certificates in your own possession or leave them in an account with a broker. Brokers always prefer holding the certificates. There are two good reasons for letting them to do so. First, if the firm is covered by the Securities Investor Protection Corporation (SIPC), and most are, the bond is protected against loss—that is, against physical loss of the certificate—not against a decline in price due to market conditions. Second, the firm is more likely than you to be immediately aware of calls. If a bond is called, the firm should immediately redeem the bonds. That should protect you against loss of interest.

Leaving a bond in a brokerage account does not prevent you from selling the bond through a different broker. To transfer a book-entry bond, you need only to notify your broker to transfer it by wire to any other firm.

If your bond is in certificate form, however, the matter becomes more complicated because you need to deliver the certificate within three days after the sale. And six weeks or more may be needed to obtain the document because it is usually not stored in the branch office. Selling through the firm holding your bond eliminates actually having to get your hands on the document, and permits you to sell at any time. If you want to sell through a different broker, then you must allow time to obtain the certificate.

Basis Points: Interest rates rise from 6% to 7%. How much have they gone up?

No, they have not gone up 1%. On a percentage basis, that increase represents a percentage difference of 16.7%. This may seem like nitpicking. But suppose, for example, that interest rates rise from 6% to 6.12%? How would you label that increase using percentages?

The answer to that question would be either imprecise or confusing. Since institutional investors make or lose thousands of dollars on seemingly minute percentage changes, they have divided each percentage point into 100 points, each of which is called a "basis point" (bp). The difference between an interest rate of 6% and one of 7% is 100 basis points; between 5% and 6%, it is still 100 basis points. An increase in interest rate yield from 6% to 6.12% represents an increase in yield of 12 basis points (which would be recorded as 12bp).

The term "basis point" is used to compare both price and yield. If, for example, you are comparing two different bonds, you might note that the three-year bond yields 6.58%, whereas the two-year bond yields 6.50%. In this instance, the three-year bond yields 8 basis points more than the two-year bond. Changes in interest rates from one day to the next, or from one year to the next, are denoted in basis points.

Under normal circumstances, yields of most bonds vary from day to day by no more than a few basis points. But occasionally moves are higher. A rise or a decline in yield from one day to the next of more than 10 basis points constitutes a major price move and therefore a major change in the direction of interest rates. Remember that changes in yield translate into changes in price and vice-versa.

Experienced investors and salespeople think in basis points. It is far easier and more precise than using percentages. Using the term will immediately mark you as a knowledgeable investor.

What Is Likely to Change?

You may well wonder why there is so much secrecy in the bond market. One answer is that this is the way the market has always functioned, and there is always resistance to change.

But another reason is that many large bond dealers consider pricing information to be one of their main competitive advantages, and they are reluctant to part with this advantage. They are resisting change ferociously.

What is more likely to change, and more rapidly, is the availability of bonds on-line. A number of firms, Schwab and Fidelity among them, have announced plans to expand their bond offerings. But firms you are unlikely to be familiar with may well become major players.

What would need to happen for pricing to become much more competitive?

Software would have to be developed that would allow individual investors to place their orders directly with the dealer listing a bond for sale. Similarly, that software should allow an individual investor who wants to sell bonds to solicit bids directly from dealers. Dealers would then have to compete anonymously on price.

However, it is not just software that must change. It also involves important regulatory issues that exist to protect individual investors.

These issues are complex and unlikely to be resolved instantly. But they point to the need for caution when individual investors buy bonds on-line.

Until pricing information becomes much more transparent, you will still need to shop around and consult a variety of sources to protect yourself on price.

Annette Thau, Ph.D., is author of "The Bond Book: Everything Investors Need to Know about Treasuries, Municipals, GNMA's, Corporates, Zeros, Bond Funds, Money Market Funds, and More," and a former municipal bond analyst for Chase Manhattan Bank. She also until recently was a visiting scholar at the Columbia University Graduate School of Business.

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