

HOW TO SHOP FOR BONDS:

PRICING MUNIS ON THE INTERNET

By Annette Thau

Buying municipal bonds is a little like buying a car—an informed buyer shops around, and is ready to do some comparison shopping. Probably no aspect of investing in municipal bonds is as frustrating to buyers as pricing and markups. While that situation is improving somewhat, pricing of municipal bonds continues to be opaque. Pricing information is slowly becoming available, but almost entirely on the Internet.

This is the third article of a three part series on municipal bonds. The first article focused primarily on interest rate risk and credit risk (“What You Need to Know About Investing in Municipal Bonds,” October 2002 *AAII Journal*). The second discussed some of the trade-offs involved in developing a strategy for buying municipal bonds (“Putting Together a Portfolio of Municipal Bond Investments,” February 2003; past articles are available on AAII.com).

The main topic of this article is how to use the Internet to obtain pricing information when shopping for municipal bonds.

MUNICIPAL BOND TERMS

Before turning to this discussion, I want to briefly define some terms that enter into the pricing of individual municipal bonds:

The Dated Date

This convoluted term simply indicates the date when a bond starts earning interest.

Accrued Interest

When you buy munis in the secondary market, the total price you pay almost invariably turns out to be somewhat higher than the price you were quoted per bond multiplied by the number of bonds. The extra amount is designated as “accrued interest.” No, the broker is not ripping you off. Let’s explain.

You will remember that coupon payments are usually 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 buy a bond in October, which pays interest in January and in July. Your purchase is occurring three months after the last coupon payment was made (and therefore three months before the next payment occurs). In January, three months after your purchase date, you will receive a coupon payment for the preceding six months; but you will have earned that interest only for the three months that you have owned the bond. 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 of interest due to the previous owner are automatically added on to the purchase price. The buyer pays the seller the accrued interest. When you, the buyer, receive the next coupon payment, which will cover interest for six months, the interest you receive will reimburse you for the three months of accrued interest paid out when you bought the bond.

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Call Provisions

Call provisions are a key factor in the pricing of munis. Most municipal bonds with long maturities are subject to call. Typical call provisions stipulate an initial call date 10 years after issue, at a price slightly above par (typically 101 or 102), as well as subsequent call dates and prices.

Call provisions are the bane of buyers of munis because they give an issuer the right to redeem a bond before its maturity date. Under normal circumstances, the call provisions are exercised only if interest rates drop substantially. By calling the bonds, issuers lower their interest costs. But investors will now have to reinvest the proceeds of their called bonds at a lower yield and their income from the new bonds will be lower than that from the called bonds.

Call provisions for bonds selling in the secondary market vary all over the place depending on how far a bond is from its original issue date and its maturity date. Brokers are required to quote both the yield-to-maturity and the yield to the first call date when they offer you a bond. You need to be particularly careful to investigate call provisions for any bond selling at a premium, because the yield to the call will be lower than the yield to maturity. Note that on bonds selling at a discount, the yield to the first call date will be higher than the yield to maturity; but the capital gain component of that yield will be taxable.

MUNICIPAL BOND PRICING

Buying municipal bonds is a little like buying a car. An informed buyer shops around. If you want to buy individual municipal bonds, you also need to be ready to do some comparison shopping. Otherwise, you will almost certainly pay too much for the bonds you buy. Probably no aspect of investing in municipal bonds is as frustrating to buyers as pricing and markups. In

the first edition of my book "The Bond Book," approximately 12 years ago, I quoted the remark of one author of a book on municipal bonds: 'let the buyer beware' or 'what the market will bear.' While that situation has improved somewhat, pricing of municipal bonds continues to be opaque. Pricing information is slowly becoming available, but almost entirely on the Internet. This article will be a guide to selected sources of pricing information on the Internet.

Why a Municipal Bond Does Not Have Just One Price

As with most other bonds, there is no central exchange where municipal bonds are bought and sold. The bond market is a vast network of dealers who sell to one another and to their clients. The dealers include large broker-dealer firms that underwrite municipal bonds (that is, these firms bring bonds to market); as well as brokers of every type, including full-service firms and discount brokers. In addition, some smaller brokerage firms specialize in municipal bonds for specific geographic areas.

Buyers of municipal bonds include individual investors (in the trade, those are called the retail market) and large institutional clients (chiefly municipal bond funds). The size of trades varies enormously. The minimum amount to buy or sell municipal bonds is usually \$5,000, but larger amounts tend to be the norm. Institutional investor trades range into the millions.

The municipal bond market, however, is the one sector of the bond market that is dominated by individual investors, who buy approximately 60% to 70% of all municipal bonds. Many individual investors buy and hold municipal bonds until they mature. As a result, some bonds trade only occasionally. There are, moreover, an estimated 1.4 million municipal bond issues outstanding.

Bond prices fluctuate on a daily, and even an intraday, basis. But if

there is no central exchange where bonds trade, and if many bonds trade infrequently, how do you determine the market price of any bond—either one that you want to buy, or one that you want to sell?

The answer is that there is not one set price. Ask two or three dealers what a particular bond is worth, and you may get two or three different answers. In spite of that, a number of services exist that price bonds daily. Pricing services assign a price to bonds that have not traded using a so-called matrix system, pricing specific bonds by comparing them to bonds that traded that day with similar maturities, call provisions, credit quality, and so on. If you own individual municipal bonds, you no doubt receive monthly statements that assign a value to the bonds you own. Those values may or may not reflect actual trades. Moreover, it is possible that another firm, pricing the same bond, would price it differently. Matrix pricing results in estimates. If you really want to price a bond, you need to call several dealers and see what they would offer you for that bond. That is why, if you want to buy or to sell bonds, for your own protection, you should ask for at least three or four bids.

BOND MARKUPS

When you buy or sell municipal bonds, you pay a commission. But commission costs are not separated out from the price. Bond prices are quoted net, with the commission included in the price. The precise amount of the commission remains undisclosed; as a result, the underlying price also remains undisclosed.

How much commission can you expect to pay?

That depends. First, because municipal bonds trade infrequently, markups are higher than they are in the Treasury market. But in addition, normal commission costs for municipal bonds vary from under one point (\$100 per \$10,000 of par

**TABLE 1. MUNICIPAL BOND TRANSACTIONS:
A SAMPLE LISTING FOR THE STATE OF NEW JERSEY ON 11/13/02**

| ▼ Ratings | ▼ Issue | | | ▼ Maturity | Call | ▼ Hi \$ Price | | |
|-----------|----------------------|------|----------|------------|---------|---------------|--------|----------|
| Insur. | ▼ CUSIP | ▼ St | ▼ Coupon | Calls | Prices | ▼ Lo \$ Price | ▼ %YTM | ▼ %YTC/P |
| AAAS | MIDDLESEX CNTY NJ | NJ | 5.125% | 12/01/2016 | | 109.494 | 4.222 | 3.254C |
| AAAM | UTILS AUTH SWR REV | | | 12/01/2007 | 101.000 | 106.397 | 4.505 | 3.898C |
| AAAF | RFDG-SER A FGIC-BOOK | | | 12/01/2009 | 100.000 | | | |
| FGIC | 596585GU7 | | | | | | | |

▼ Volume of \$600,000 for ▼ 5 trades. ► Show Details of Yesterday's Trades. ► Show Trade History.
► Search MuniStatements.com for official statements on this issue.

Source: www.investinginbonds.com.

value bonds) for actively traded issues with short maturities and high credit quality; to about three points (\$300 per \$10,000 par value bonds) for inactive traded bonds with long maturities. Actual markups vary from bond to bond based on a variety of factors including, but not limited to:

- **Maturity:** Bonds with short maturities trade with lower markups than bonds with long maturities.
- **Credit quality:** The lower the credit quality, the higher the markup.
- **The number of bonds being purchased or sold:** 25 bonds (that is, \$25,000 par value) constitute a so-called round lot. Commission costs tend to be higher on smaller lots.
- **Whether the market is strong or weak:** In a strong market, where demand is high, commission costs may be lower.
- **The "liquidity" of the particular bond:** Is the issuer of this bond well known? Do its bonds trade frequently? The bonds of issuers who issue a lot of bonds, which trade frequently, generally trade with lower markups—but again, all the other factors previously mentioned also come into play.
- **Whether you are buying or selling:** It is more expensive to sell than to buy bonds, which means markups for selling bonds are inevitably higher than for

buying bonds. In a worst-case scenario, for example, trying to sell a long maturity bond with marginal credit quality in a down market, you may be lucky just to get a bid; and commissions costs are likely to be higher than 4%.

These ranges are estimates of customary and acceptable markups. Commission costs may be higher or lower on any one trade based on the dealer's buying price or markup. Moreover, unscrupulous dealers sometimes charge more, possibly a lot more. So how do you know whether or not the bond you are being offered is priced fairly?

Before the advent of the Internet, unless you had a relationship with a broker that you trusted implicitly, your only recourse was to call several different dealers in order to get some sense of what a fair price would be for any bond. Fortunately, you can now turn to the Internet for some of this information.

INTERNET PRICING INFO

One of the first Web sites to provide information on the pricing of municipal bonds, and still one of the most useful, is the Web site of the Bond Market Association (www.investinginbonds.com). This Web site publishes a list, on a daily basis, of approximately 1,000 bonds that traded at least twice the previous day. (Initially, the list was

limited to bonds that traded at least four times on the previous day. The current practice of listing bonds that traded at least twice results in a much longer list—and the software seems more subject to a variety of glitches—so patience may be required.) To look up prices, first select a state. You can sort results by maturity, credit quality, etc. Table I shows a sample listing that appeared Nov. 13, 2002, for the State of New Jersey.

Reading from left to right, the listing shows:

- **The rating and if the bond is insured, the insurer:** This bond is insured, and since the insurer is FGIC, the rating is AAA, based on the rating of FGIC.
- **The issuer of the bond:** Middlesex County. The listing further specifies that it is a sewer revenue bond, but because it is a county bond, it probably also has county general obligation backing. The acronym RFDG stands for refunding, which means that this bond is refunding a previously issued bond with a higher coupon. Note also the **CUSIP number** (596585GU7), which identifies exactly which bond of that particular issuer was traded.
- **The state of the issuer:** NJ.
- **The coupon:** 5.125%.
- **The maturity date of the bond:** That is, the date at which it will be redeemed at par: 12/01/16.

Also, call dates and the prices corresponding to those call dates: 12/01/2007 at 101, and 12/01/2009 at 100.

- The high and low prices at which this particular bond traded: 109.494 and 106.397; and the corresponding yields to maturity resulting from those prices: 4.22% to 4.50%.
- The yields to the first call date corresponding to the high and low prices: 3.25% and 3.89%.

More precise data for each trade can be obtained by clicking on a second level of data. The legend at the bottom of Table 1 shows that on November 13, a total of \$600,000 (par value) traded for this particular bond. Clicking on “Show Details of Yesterday’s Trades” yields the information shown in Table 2.

Again, reading from left to right, the listing shows:

- The exact time of each trade.
- The size of each trade (par value—ranging from \$50,000 to \$200,000).
- Whether the trade was a customer buy (CB), a customer sell (CS) or an interdealer (that is, dealer to dealer) trade (DD). The term “customer” refers to individual investors.

Doing the arithmetic yields some interesting comparisons:

- Two customer prices are listed (\$108.765 and \$109.494). That translates into prices of \$1,087.65 and \$1,094.94 per bond, with a price difference of \$7.29 per bond or ½% per bond. On an order of 50 bonds, that would be a price difference of \$365 more, and on an order of 100 bonds it would be a difference of \$730.
- The dealer trade of \$106.397 translates into a price of \$1,063.97 per bond: \$30.97 and \$23.68 less than the respective customer buys. You can infer that those are the markups for each bond: approximately 2% and 3% respectively.

This particular listing shows no customer sells. In listings where

customer sells appear, however, customer sell prices are typically ½ point to two points lower than dealer trades. On this particular trade, “fair” CS prices might vary between 104 and 106. That means a typical seller would receive a price of \$1,040 or \$1,060 per bond.

These are actual prices. Therefore, markups are included. But remember also that these are yesterday’s prices: today’s prices, even for the same bonds, are unlikely to be identical. However, unless there have been major moves in interest rates, it is a good first cut of where the market is for bonds that would have comparable maturities, credit quality and call provisions.

A second, more general source of information is published daily by Bloomberg and the Bond Market

Association (www.bloomberg.com). This is a table of actively traded bonds entitled “National Municipal Bond Yields for AAA, Tax Exempt, Insured Revenue Bonds.” Table 3 shows a listing that appeared on November 13, 2002, the same day as the previous listings.

This listing shows benchmark (that is, aggregate or representative) yields for AAA, insured revenue bonds that are actively traded, at various key maturities, ranging from two to 30 years. The table also includes:

- Changes in yield compared to the previous day (the first two columns);
- The tax-equivalent yield for investors in the 30% bracket; and
- Yields for several prior dates.

TABLE 2. TRADE DETAIL FOR STATE OF NEW JERSEY LISTING ON 11/13/02

| ▼ Issue | ▼ CUSIP | ▼ Coupon | ▼ Maturity |
|--|---------|----------|------------|
| MIDDLESEX CNTY NJ UTILS AUTH SWR REV REF-SER A 596585GU7 | | 5.125 | 12/01/2016 |

This issue traded five times on 11/13/2002. Below are individual trade details for this issue in order of trade time (military time, as reported by dealer).

| Trade Time | Par Traded | Prices | %YTM | |
|------------|------------|-----------|-------|----|
| 15:30 | \$200,000 | \$106.472 | n/a | DD |
| 16:18 | \$200,000 | \$106.397 | n/a | DD |
| 17:01 | \$50,000 | \$108.765 | 3.388 | CB |
| 17:29 | \$50,000 | \$109.494 | 3.250 | CB |
| 17:30 | \$100,000 | \$109.494 | 3.250 | CB |

CB: Customer Buy (dealer sale to customer)

CS: Customer Sale (dealer purchase from customer)

DD: Inter-dealer trade

Source: www.investinginbonds.com.

TABLE 3. NATIONAL MUNICIPAL BOND YIELDS: SAMPLE LISTING FOR 11/13/02**Muni Bond Yields**

Wed, 13 Nov 2002, 6:57pm EST

NATIONAL MUNI BOND YIELDS
Triple-A Rated, Tax-Exempt Insured Revenue Bonds

| Maturity | 11/13 Yield | 11/8 Yield | Change in Yield | 30% eq Yield | 11/6 Yield | 10/16/2002 Yield | 5/15/2002 Yield |
|--------------|----------------|---------------|--------------------|-----------------|---------------|---------------------|--------------------|
| Two year | 1.78% | 1.79% | -0.01% | 2.54% | 1.91% | 1.82% | 2.46% |
| Five year | 2.80% | 2.83% | -0.03% | 4.00% | 2.94% | 2.81% | 3.55% |
| Seven year | 3.30% | 3.35% | -0.05% | 4.71% | 3.46% | 3.31% | 3.99% |
| Ten year | 3.80% | 3.83% | -0.03% | 5.43% | 3.94% | 3.79% | 4.46% |
| Fifteen year | 4.51% | 4.51% | 0.00% | 6.44% | 4.61% | 4.53% | 5.05% |
| Twenty year | 4.91% | 4.91% | 0.00% | 7.01% | 5% | 4.97% | 5.31% |
| Thirty year | 4.97% | 4.95% | 0.02% | 7.10% | 5.04% | 5.04% | 5.35% |

Source: www.bloomberg.com and the Bond Market Association.

The most important information conveyed by this table is the current shape of the yield curve in the municipal market. The yield curve is a graph of yields at different maturities. Typically, the yield curve in the municipal market is steeper than that of the Treasury market. That means that there is a greater difference between yields of bonds with short maturities, and those of bonds with long maturities. But bear in mind that the shape of the yield curve changes over time. The yield curve tells you how much yield you pick up by going out further along the yield curve.

Although the yields shown in Table 3 are low by historical standards, the yield curve is actually very steep, with 30-year maturity bonds yielding approximately 320 basis points more than two-year bonds. That means that there is a significant pick-up in yield for buying intermediate or long maturities compared to shorter maturities. But note that the increase in yields tails off significantly after 15 years. That is almost always the case, regardless of interest rate levels. This underlines an important issue. Many brokers who sell municipal bonds advise buying primarily the longest-term bonds. But those bonds incur significantly higher interest rate risk than bonds with intermedi-

ate (five- to 15-year) maturities.

Given the fact that interest rates are currently at historically low levels, before buying long-term bonds you need to consider whether you are getting adequately compensated for the additional interest rate risk of going out to 20- and 30-year maturities.

BONDS FOR SALE ON THE WEB

One drawback of the price information shown on the Bond Market Association's InvestinginBonds.com is that those prices are one day old.

It is now possible to shop for municipal bonds on the Internet.

Bear in mind that while some brokers maintain an inventory of bonds that they reoffer for sale, many do not. If you call a broker and specify that you are looking for a bond that falls within certain parameters—say you want a bond rated AA or better, for the state of New Jersey, with a maturity of 10 to 12 years—the broker will canvass a variety of trade sources to find bonds matching your parameters. The Internet provides an ideal venue for this type of information. Several firms—ValuBond, Bond Express, Bond Desk—now maintain databases of bonds offered for sale by different dealers. Many brokers use one or more of these databases.

You can now access a number of these databases via the Internet, but with one difference: the prices listed include markups. The price you see for any bond is the price you, the customer, would pay, not the price paid by the dealer.

If you have a brokerage account, you will no doubt be able to access the bond offerings of your brokerage firm directly by logging on to your account. Even if you do not have a brokerage account, financial sites such as Bloomberg.com and Bondsonline.com also display bonds for sale. Some sites (munidirect.com) specialize in municipal bonds, for example. These databases give you the pertinent basic information about the bonds: credit rating; how many bonds are available for sale; maturity and call dates; yield to maturity; yield to call, price, etc. Again, markups are included in the price.

In some cases, you can now place orders directly on-line for the bonds. Many sites, however, require that in order to complete the trade you need to call a broker—who will check if the listed bonds are still available, and at what price. In all instances, a caveat notes that prices are subject to change. Some sites include the information that some of the listed prices are not firm. It never hurts to see if your broker can get it for you for less.

How can you use this information?

Let's say that you are currently shopping for bonds. You may have a relationship with one or more brokers who call to offer you bonds. Or you may call a broker when you are ready to invest.

- Before you actually place an order, spend some time looking at the previous day's prices; the current yield curve; and bonds for sale on the Internet.
- To determine which of several different bonds is the better buy, just remember that yield to maturity and price are two sides of the same coin. Therefore, for comparable bonds, the bond with the higher yield to maturity is the better value. The trick is that you must be aware of the factors that make bonds truly comparable. Those include: exact maturity dates; exact call provisions, credit quality, size of the lot, liquidity of the bond, etc. Even apparently minor differences affect price.
- Don't allow a broker to pressure you into placing an order because the offer is "too good to pass up." You can always ask a broker to hold a bond for some period of time (say at least an hour) while you check your sources.
- You can also try to shop the same bond to one or more dealers. If you see an attractive bond offered on the Internet, take its CUSIP number and ask one or more brokers if they can get it for you and at what price. Your broker may suddenly discover a better buy in his inventory!
- If the yield on a bond seems particularly high (compared to similar bonds), by all means, call one or more brokers to get additional information on that bond. There may be risk factors (possible downgrades, for example, or other speculative factors) not disclosed on the Web site.

One more caveat: Many brokers add a small charge per bond to the price you see on their Web site in the form of a fee per bond (\$3.00 to \$5.00 per bond, depending on the size of the order), or miscellaneous fees totaling \$50.00 or more. This may create the impression that these fees are the entire commission—and that for that reason, the bonds are a bargain. These fees, however, are added to the dealer markup. Don't simply accept the claim that these bonds are a good buy. The only accurate way to evaluate whether or not these (or any) bonds are a good buy is to compare their yield to maturity to that of other comparable bonds on the same day with all "miscellaneous" charges added in.

No one can point you to a single best source for purchasing bonds. The only way to determine your own best source is to shop around, ask questions, and compare offers.

Bear in mind that if you are shopping for bonds directly on-line, you are on your own. The other side of the coin is that many brokers are primarily "order takers," unable to answer questions or explain aspects of certain bonds that may not be immediately obvious. But if you take the time to shop around and ask questions, you will probably find a broker who specializes in municipal bonds, who really understands the municipal bond market and who will spend time with you to understand your needs and preferences. It has been my personal experience that such a broker can be a most valuable resource.

BUYING AT ISSUE

If you want to buy individual municipal bonds in small amounts (\$5,000 or \$10,000 size lots) that you intend to hold to maturity, and if you wish to avoid the hassles of buying in the secondary market, a very good option is to buy bonds at issue, that is, when they are initially marketed to the public. Both the New York Times and the Wall Street Journal list upcoming sales of

municipal bonds every Monday.

Buying at issue has a number of advantages. You will get market yields no matter what maturity or how many bonds you are buying. For a few days, the bonds are priced at par (or at a uniform price) by all the dealers in the syndicate. They remain at par until the bonds "break syndicate" and are allowed to trade at what the market will bear. During that time, moreover, prices—and therefore yields—are usually attractive because dealers are anxious to sell the bonds. The buyer also receives the longest possible call provisions.

To buy bonds at issue, however, also requires you to shop around. New issues are not available from all brokers. Major brokerage firms (large broker-dealers such as Merrill Lynch) that participate in bringing bonds to market usually have them. Smaller brokerage firms, or discount brokers, may not have them. Regional firms that specialize in bonds from your geographical area should also have bonds at issue for that area.

OTHER INFO AVAILABLE

The information available on the Internet goes beyond basic pricing information. Web sites are constantly changing and many more are coming on-line. A brief mention will give a glimpse of some additional information currently available.

InvestinginBonds.com

In addition to pricing information, InvestinginBonds.com (www.investinginBonds.com) enables you to obtain the trading history of many bonds by simply typing in their CUSIP number. You can judge whether the bond is actively traded by the number of trades. Actively traded bonds trade several times a month. Some bonds seem to trade only a few times a year. The original prospectus of some secondary bonds may also be available on the same Web site.

Bloomberg.com, Bondsonline.com

Bloomberg.com (www.bloomberg.com) and Bondsonline.com (www.bondsonline.com) both list municipal bonds for sale. In addition, both have much more extensive coverage of the municipal bond market than can be found in the daily print financial press. Many other financial Web sites supply bare-bones information on the municipal market such as yield curves. But beware: The aggregate yields they supply are very general and sometimes as much as ½% off market yields for individual bonds.

Municipalbonds.com

MunicipalBonds.com (www.municipalbonds.com) is an alternate source of extensive pricing data. According to its developer, its mission is to bring transparency to the municipal bond market. It publishes voluminous lists of trades and prices occurring the previous day, with some spreads included. In addition, it publishes annual lists of the 100 worst trades for the preceding year, both nationally and for individual states. Some of these can make you gasp: hapless sellers selling a bond for 25 cents on the dollar, to a dealer who then charges 90 cents for the same bond. Finally, daily, it red-flags trades where commission costs exceed 5%; and a number of these occurs routinely.

The Wall Street Journal, Investor's Business Daily, and Barron's

What if you do not have access to the Internet?

Even if you do not own a computer, access is usually available at your local library. In the absence of any other available source, you can consult the tables published daily by the Wall Street Journal and Investor's Business Daily, and on the weekend by Barron's. These tables

show prices and yields of a limited number of a number of very actively traded bonds. But the yields listed are accurate only for wholesale (that is, very large) trades.

SUMMARY AND CONCLUSION

Here is a summary and conclusion of the major points covered in all three articles concerning municipal bonds.

- 1) As a rule, individual municipal bonds should be purchased primarily if you do not plan to resell your bonds. Otherwise, commission costs (which are paid both when you buy and when you sell) seriously reduce overall returns. Remember also that commission costs are particularly high if you need to sell.
- 2) Before buying any bond, be sure that you understand the factors behind its credit rating. Monitor the rating while you own the bond.
- 3) Buying individual bonds involves trade-offs between risk and return. Bonds with longer maturities yield more than bonds with shorter maturities; but interest rate risk increases as maturities get longer. Because the municipal yield curve is generally steeply upward sloping, the sweet spot is usually somewhere between the five- and the 15-year marks. If you cannot tolerate any pricing risk, stay closer to five-year maturities. If you want to emphasize income, buy closer to the 15-year maturity. If you have a large portfolio, a ladder of maturities in this range enables you to diversify both income and interest rate risk.
- 4) Higher credit quality results in somewhat lower yields for bonds with comparable maturities, but risk of default is lower. As a rule, however, risk of default is extremely low for municipal bonds rated A+ or better.
 - If a bond is rated AAA, find out whether the rating is based on bond insurance or if the bond is AAA on its own. If the rating is based on insurance, try to find out how the bond would be rated without insurance. Bonds rated AAA (so called natural AAAs) are considered more gilt-edged than bonds whose AAA rating is based on insurance.
- 5) Before buying a bond, consider whether you are buying the bond primarily for income, or whether you will need to redeem the bond in the near future, for example, to put a downpayment on a house. Do not buy long-term bonds (or bond funds) for short-term uses. You cannot know at what price you would be able to redeem your bonds. Instead, buy bonds targeted to mature when you will need the money.
- 6) If you are buying long-term bonds primarily for income, look for premium bonds. Yield is usually somewhat higher, and volatility somewhat lower, than for par or discount bonds with comparable maturities.
- 7) Municipal zero-coupon bonds are a good vehicle for funding future known expenses such as a grandchild's college education. They enable you to invest small sums at regular intervals, and to target the maturity to the exact time money will be needed.
- 8) Before buying (or selling) any municipal bond, consult Internet sources for price information, or obtain a number of different bids. ♦