Municipal Securities:
An Investor's Guide

Introduction

The purpose of this guide is to provide investors with an overview of the benefits and risks offered by municipal securities. Municipal securities are often thought of as solely tax-exempt investments. Although most municipal bonds are exempt from federal income tax, and in many cases also exempt from taxation by the issuer's home state, some municipal bonds are issued on a taxable basis. For many investors, reducing taxes remains an important goal and properly selected municipal bonds are one source of tax-free income.

The more information you have, the better your investment decisions are likely to be. In addition to this guide, investors can access the Municipal Securities Rulemaking Board-operated Electronic Municipal Market Access System ("EMMA") for a comprehensive, centralized online source of municipal disclosures, market transparency data, and educational materials about the municipal securities market, as well as individual municipal securities. EMMA is available at: http://emma.msrb.org/.

What Is a Municipal Security?

A municipal security is a debt security issued by states, municipalities and various public authorities to finance public-purpose projects. Municipal securities can also be issued by territories and possessions of the United States, housing authorities, port authorities and other government agencies.

Typically, the issuer has borrowed the money for any number of reasons: a new road, a school, a sewer line or courthouse, etc. In exchange for lending money to the issuer, the issuer pays the borrower a specified rate of interest (usually paid semi-annually) and returns the principal amount of the security at a specified time.

It is important to note that there is a class of municipals that are taxable. For a discussion on taxable municipals and the Alternative Minimum Tax, see pages 3 and 9, respectively.

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Note: This booklet contains a glossary of terms relating to the municipal bond market. It begins on page (12)

The Municipal Bond Market

The New Issue/Primary Market

When a municipal issuer borrows funds for a public purpose, it usually does so through the capital markets by issuing bonds. New issues of municipal bonds are purchased (underwritten) by one or more investment banking firms that then reoffer the bonds to retail and institutional investors. Investors become lenders to the issuer and receive the loan repayments as payments of principal and interest on the bonds.

Underwriters determine the coupon rates and prices that they will bid or negotiate for bonds by evaluating the new issue in terms of the market for similar issues. Criteria include credit quality, trading quality, and scarcity/saturation of new issues and the overall levels of interest rates.

Every year, municipalities throughout the United States borrow money to fund a variety of projects. Over the past decade, this has averaged over $300 billion annually.[1]

[1] Source: *The Bond Buyer*, January 2, 2012.

The two most common methods of issuing bonds are via competitive bid and by negotiated underwriting. In the case of competitive bids, an issuer designates a day and a time and invites bids from underwriters. The bidder with the lowest net interest cost is awarded the bonds and then resells them to retail and institutional clients. In the case of negotiated underwritings, which comprise the majority of new issues, the process for setting the pricing, yields, and allotting the bonds can extend over several days.

Secondary Market

The secondary market is traded by professionals in an "over-the-counter" market (see glossary). There is no exchange equivalent for municipals because there are simply too many different bonds available to list each efficiently.

Bond traders make markets by stating the price at which they will "bid" for certain bonds, and the price that they "ask" for bonds they already own. The difference between bid and ask prices varies with the size of the issuer, the amount of bonds traded, the credit quality, the remaining time to maturity or call and the relative volatility of the market.

Investors seeking price quotes can contact their Financial Advisor. Investors can also obtain additional information by accessing EMMA, available at: http://emma.msrb.org/.

Tax Exempt or Taxable Investments?

One way to decide whether municipal bonds are an appropriate investment is to determine what you would have to earn with a taxable investment of similar quality in order to match the yield of a municipal bond that you might be considering.

Since taxes change from year to year, we are providing you with a simple formula that shows what a taxable security would have to yield in order to equal the take-home yield of a tax-exempt municipal bond.

$$\frac{\text{Municipal Bond Yield}}{\text{100\% -\% Tax Bracket}} = \text{Taxable Equivalent Yield}$$

To show you what we mean, here is an example using a 5% municipal bond yield and a federal tax bracket of 28%:

5% Municipal Bond Yield/100%-28% Tax Bracket = 6.94% Taxable Equivalent Yield

Another way to compare tax-exempt yields to taxable yields is to look at the income streams of each. Using the example above, the 5% tax-free municipal yield and the 6.94% taxable yield, and assuming an investment of $100,000, the income streams are outlined in the following example.

	Tax-Free	Taxable
Annual Coupon Income	$5,000	$6,940
Federal Tax (28%)	$0	$1,940
After-Tax Income	$5,000	$5,000

The 6.94% yield on the taxable bond seems higher, but the calculation above illustrates how the after-tax income from the taxable bond is equal to the income on the municipal bond yielding 5%. What's more, the table does not consider state income taxes, which may further reduce your after tax income from the taxable bond.

Types of Bonds

Municipals can be broadly classified into two groups: general obligation bonds and revenue bonds. The major distinction between them is how they are secured; that is, where the money will come from to pay back the principal and interest of the loan to the bondholder.

General Obligation Bonds. These bonds are issued by a governmental unit that has the power to levy taxes. They are secured by the issuer's promise to pay promptly the semiannual interest and principal when due. General obligations usually compel the issuer to use its ability to levy taxes for the repayment of the bonds. They finance public improvement projects such as streets, free access highways, water systems, schools, police and fire stations that benefit the entire community.

Revenue Bonds. These are usually issued to finance a project or purpose that will generate income that can be pledged for repayment of the bonds; for example, water, sewer or electric power plants, airports, bridges, college dormitories and housing developments. The revenue generated by the project is used to pay the principal and interest of the bonds.

Other Types of Bonds That Are Worth Noting

Certificates of Participation (COPs). Certificates of participation bonds are financings in which an investor purchases a share of the lease revenues rather than a bond secured by those revenues. A separate entity generally uses the proceeds from the COP to construct a facility or acquire equipment that is then leased back to the municipality. In many cases, payments by the municipality are subject to annual legislative appropriations.

Pre-refunded Bonds. Pre-refunded bonds ("pre-res") are municipal bonds that are backed by U.S. Treasury bonds or other governmental securities. In a typical pre-refunded issue, a municipality sells new bonds and uses the proceeds to buy Treasury securities or other taxable fixed-income securities. It then sets those securities aside, keeping them in a special escrow account that will be used to redeem the older, higher-yielding bonds either at the earliest possible call date or some later date.

Zero-Coupon Bonds. Municipal zero-coupon bonds are bonds issued at a fraction of their maturity value (the longer the maturity, the greater the discount). Interest is only paid with principal at maturity or at the time the bonds are called. Instead of being paid semi-annually like other bonds, the interest is automatically reinvested or compounded at the original rate and, if held to maturity, investors are not vulnerable to re-investment rate fluctuations.

Interest on tax exempt municipal zero-coupon bonds is exempt from federal taxes and, if bought by residents in most states of issuance, may be exempt from state and local taxes as well. Therefore, investors in properly selected zeros are generally not subject to taxes on "phantom" interest throughout the life of the bonds or on principal at maturity. (However, the investor may be subject to a capital gains tax on a portion of the increase in market value).

Zero-coupon bonds are an ideal investment for individuals seeking to fund future known expenses, such as a child's college education or income requirements after retirement.

Taxable Municipal Bonds. Issuers will sometimes opt to sell municipals that are subject to federal and, depending on the investor's home state, state and local taxes. Taxable municipal bonds generally offer yields comparable to those of other taxable bonds, such as corporate bonds or bonds issued by a U.S. governmental agency, rather than to those of tax-exempt municipals.

Higher Yielding Bonds. Another segment of the municipal bond market deals with lower-rated, higher-yielding municipal bonds. These can be taxable as well as tax-exempt and can also be subject to the Alternative Minimum Tax calculation. While in some cases these issuers have investment grade ratings, many do not. This segment includes hospital and nursing home credits, tobacco securitization issues, bonds backed by airlines, as well as various general obligation and revenue debt.

The increased yield this segment of the market affords investors is offset by the risk, in some cases, of repayment and the potential for reduced marketability should a client want to sell the bonds.

High yield bonds can add yield to portfolios but should only be considered after a thorough review of the risks involved. Consulting your Financial Advisor should be the first step in the discussion.

Selecting the Correct Municipal Bond

In selecting the correct municipal bond, there are several key factors to consider:

- Bond Features;
- Issuer disclosure filings;
- Bond's Rating;
- Bond insurance;
- Pricing, Interest and Yield;
- Interest Payments;
- Tax implications – including the possibility that the bond may be subject to the federal Alternative Minimum Tax (AMT) or may be fully taxable;
- Call Provisions ;
- Risks – including market risk, credit risk and reinvestment risk.

We'll cover each of these important factors in the sections that follow.

Bond Features

In addition to such key terms as interest rate, principal and call provisions, which are discussed later, investors should pay attention to the following bond terms when evaluating municipal securities.

- **Sources of Funding -** Identify the sources from which the funds are derived and the application of funds in connection with the issue. As described above, sources of funding for municipal issues usually fall into one of two groups: general obligation bonds and revenue bonds.
- **Repayment Priority -** Investors should also discuss with their financial advisor whether other obligations of the bond issuer take precedence for payment. Investors should also understand the difference between senior debt, which is paid first, and subordinate debt, which is paid after senior debt is paid.
- **Maturity of Bond –** The maturity date is the specific day the issuer is obligated to repay the principal or par value (see glossary) of the bond. Municipal securities are usually available with maturities from one month to 30 years or more. Short-term securities, often called notes, typically mature in a year or less while long-term securities, or bonds, will mature later than one year from issuance. Typically, a municipal bond issue is structured so that some bonds mature over a number of years. These are called serial bonds.

Issuer Disclosures

Official Statement

Underwriters assist the municipal issuer with preparing and filing a prospectus called an official statement. The official statement describes the essential terms of the bonds, including call provisions, the sources pledged to repay the bonds, the issuer's covenants for the benefit of investors, and other pertinent information.

Financial and/or operating data about the issuer of the securities or any other parties who are responsible for repayment of the bonds is generally provided in the official statement, together with descriptions of any covenants of the issuer or other parties intended to protect the investor's financial interests. Furthermore, if the bonds being issued are revenue bonds, the official statement generally will provide additional financial, operating or other information intended to assist an investor in determining whether the project is likely to generate sufficient revenues to make such payments.

Generally, underwriters are required to submit to the MSRB copies of the official statement for all new issues of municipal securities, which are made available on EMMA.

Continuing Disclosures

In addition to filing the official statement, issuers disclose important information about a municipal bond through continuing disclosures. The information contained in these disclosures generally reflect the financial or operating condition of the issuer as it changes over time, as well as specific events occurring after issuance that can have an impact on the ability of the issuer to pay amounts owing on the bond, the value of the bond if it is bought or sold prior to its maturity, the timing of repayment of principal, and other key features of the bond. Each bond will have its own unique set of continuing disclosures, and not all types of continuing disclosures will apply to every bond.

The EMMA website, referenced earlier, publicly displays continuing disclosures as well as official statements. EMMA can be accessed at: http://emma.msrb.org/.

Bond Rating

A bond rating is the grade rating agencies place on a security to indicate risk of default. Presently, three nationally recognized companies, Moody's Investors Service (Moody's), Standard & Poor's Corporation (S&P) and FitchIBCA (Fitch), provide credit analysis of and ratings on municipal bonds. These ratings are intended to reflect bond quality and to give you a benchmark on particular issuers' creditworthiness.

The following is a summary of the Moody's, S&P and Fitch categories:

	Moody's	S&P	Fitch
Prime	Aaa	AAA	AAA
Excellent	Aa	AA	AA
Upper Medium	A	A	A
Lower Medium	Baa	BBB	BBB
Speculative	Ba	BB	BB
Very Speculative	B, Caa	B, CCC, CC, C	B, CCC, CC, C
Default	Ca, C	D	DDD, DD, D

Moody's, Standard & Poor's and Fitch will sometimes indicate a slightly stronger or weaker position by using additional symbol such as A1, A+, or A-.

The credit quality of municipal notes is based on the issuer's ultimate ability to pay or to roll over the notes at maturity. Moody's rates notes using investment grades MIG-1+ through MIG-4 in descending order. Standard & Poor's rates notes SP-1+ through SP-3. Fitch rates notes F-1+ through F-4.

Bond Insurance

Bond insurance is a form of backup security for a municipal bond issue, under which the investor is insured against default on principal and interest, when due.

Since the onset of the financial crisis in 2007, the financial standing of these companies has been negatively impacted and they have all become subject to rating downgrades. There are insured bonds available to investors today, however the underlying rating remains the key to assessing a bond's creditworthiness.

Pricing, Interest, and Yield

Discount, Par and Premium

Interest rate fluctuations can change the value of your bonds; when interest rates change, the value of a bond can be equal to, greater than or below the original price of issuance. Bonds are referred to trading at par, premium and discount, respectively.

As an example, assume that you just purchased a newly issued bond due in the year 2028 with a coupon of 4% offered at par. Six months from now, you decide to sell your bond. On the day you decide to sell, another issue comes to market, also due in the year 2028 with the same credit rating. Suppose, however, that interest rates have gone up to 4.5%. To make your bond competitive to the next buyer, you would receive a bid price based on a 4.5% yield to maturity or approximately $960 per $1,000 principal amount.

Thus your 4% bond would be selling at a discount from its original par value.

If the interest rates did not vary at all in the six months, your sale price (or "Bid") would be very close to, or at, your original purchase price, so long as the credit rating has not changed. Now the bond is selling close to its par value.

On the other hand, if interest rates had dropped in the six-month period, say to 3.5%, you could sell your 4% bond above your cost. Your bond might now be valued based on a 3.5% yield to maturity, or approximately $1,040 per $1,000 principal amount. Your 4% bond would be selling at a premium to its original par value.

Interest Rate and Yield

In addition to the pricing of a municipal security, two equally important factors in deciding which municipal bond to consider purchasing are interest rate and yield. There are four terms to understand in this section:

- Interest or coupon rate
- Yield to maturity/call
- After-tax yield
- Current yield

Interest or Coupon Rate. This is the annual tax-free rate, expressed as a percentage of income per $1,000 principal amount, usually paid semi-annually. (Most bonds are issued in $5,000 denominations). A $5,000 municipal bond with a coupon rate of 5% pays you $250 per year until the bond matures. At the original issuance of the bond, except for variable rate bonds, the interest or coupon rate is set and will never change. Interest on municipal bonds is computed on a 30-day month/360-day year.

The bond's rating will affect its interest rate when the bond is issued, as well as its offering yield in the secondary market. For example, suppose that two different cities issue municipal bonds for the same type of project on the same day. One city has a "AAA" rating, while the other has an "A." In order to entice investors, the city with the "A" rating will have to offer a higher interest rate to make up for the lower credit rating.

Yield to Maturity. Municipals, like other fixed-income bonds, are sold based on the bond's yield to maturity. This is the return (stated as a percentage) that you will receive if you hold the bond to maturity.

The most important aspect in understanding yield to maturity is that when you invest in a bond and receive interest semi-annually, it is assumed that during the life of the bond each semi-annual interest payment will be reinvested at the same rate as the stated yield to maturity. For example, you purchase a bond at par with a yield to maturity of 5% and a maturity of 20 years. It is assumed that each interest payment is reinvested at 5%. In the real world, this rate may vary.

Yield to Call. This is the return (stated as a percentage) that you will receive if the security is redeemed prior to its maturity date.

After-Tax Yield. On a discounted municipal bond the after-tax yield is the yield to maturity after taxes are paid on the market discount portion.

It also refers to the yield you would receive on a bond that is issued outside your state of residence and that is subject to your own state's income tax.

Current Yield. While it is one of the easiest calculations to compute, current yield does not give an accurate picture of a bond's true yield. That's because it does not account for the bond being redeemed at par at maturity or called at a premium or par. Current yield is obtained by dividing the amount of interest received in one year (the coupon rate) by the purchase price of the bond.

For example, a 5.375% general obligation bond issued by the State of Florida due 3/1/2032 and purchased for a premium price of 115.00 or $1,150 per $1,000 principal amount, regardless of the maturity, has a current yield of 4.67%. In other words, on a premium bond, the current yield calculation may substantially overstate the "true" yield, the yield to maturity. The yield to maturity is actually 3.40%.

Interest Payments

With the exception of zero coupon municipal bonds, which pay no interest, most municipal bonds pay semiannually. It should be noted that on new issues, the first interest payments may be more or less than a typical 6 month payment amount. After the first coupon payment it reverts to a normal semiannual payment schedule.

Tax Implications

While the interest income earned on a tax-free municipal bond is exempt from federal income taxes, and often exempt from state and local taxes as well, certain bonds purchased at a discount may be treated differently. If you purchase a discount bond in the secondary market and sell it for a profit or hold on to it until maturity, you may be subject to an income tax on all or a portion of the difference between the purchase price and the final price. The market discount will or may be taxed as ordinary income for municipal bonds purchased after April 30, 1993. Investors should ask their Financial Advisor for the after-tax yield when buying such market discount bonds. In some instances, the after-tax yield of market discount bonds may be more attractive than the yield to maturity of par bonds with a similar maturity, rating and name. Gains, however, resulting from changes in market conditions subsequent to purchase will be taxed at the capital gains tax rate. Finally, for bonds issued at a discount, the portion of the investor's yield resulting from that discount pricing is treated as tax-exempt income ("Original Issue Discount"). Please consult your tax advisor for the current tax status of discounted bonds and the appropriate tax rate that may apply.

On the other hand, if you purchase a bond at a premium and hold it to maturity, you cannot declare capital loss. Here's why: the premium you pay results from the higher coupon payment that you receive over the life of the bond. Since the coupon is exempt from taxation, the premium incurred to receive that coupon must be amortized over the remaining life of that bond. (Although the yearly amortization reduces your tax basis, the amortization is not tax deductible.)

Thus, when the bond is redeemed at par, the premium should be fully amortized bringing your cost basis for tax purposes down to par.

What Is the Alternative Minimum Tax (AMT)?

Essentially, the alternative minimum tax (AMT) is a calculation designed to tax certain "preference items" or income sources that receive more favorable tax treatment under the regular federal income tax code, including interest on so-called "private activity" municipal bonds, including most housing bonds, airport bonds, and handful of other categories. Investors who expect to pay the AMT tax, rather than the regular income tax, should avoid private activity bonds, because interest on such bonds is included in the AMT calculation. On the other hand, individuals who do not have an AMT problem should consider AMT bonds, since they yield slightly more than non-AMT bonds of the same quality and maturity.

Comparing In-State vs. Out-of-State Bonds

There are some important questions investors should ask when deciding whether to buy bonds issued in their state of residence or issued by other states, including:

Does the tax treatment differ? In a few states, all municipal bond interest is taxed. In some others, no municipal bond interest is taxed. In most states with an income tax, however, in-state bonds are exempt from state and local taxes, while out-of-state bonds are not.

What is the "effective" state income tax rate? The effective state income tax is the tax rate paid after the interaction between the federal income tax system and a state's income tax system (for investors who itemize their deductions on their federal income tax returns). The calculation for the effective state income tax is:

State income tax rate x (1-federal income tax rate).

Under federal tax law, taxes paid at the state level are deductible on a federal income tax return.

In the case of an individual residing in a state with a 7% state income tax rate in a federal income tax bracket of 28%, the effective income tax rate is:

7% x (1 - .28) or 7% x .72 = 5.04%

Municipal Equivalent Yield. When comparing in-state vs. out-of-state bonds with equivalent quality, maturity, call protection, etc., investors must consider which bond yields more after applying the effective state tax on the out-of-state bonds. When in-state bonds in any given state become scarce, causing their yields to decline, it may make economic sense to consider investing in an out-of-state bond. In some instances, after paying state income taxes on the interest of the out-of-state bond, the after-tax yield may still be more attractive than investing in an in-state bond, or in a taxable alternative (subject to both state and federal income taxes). To help investors decide whether an out-of-state bond makes sense the municipal equivalent yield (MEY) must be calculated.

The MEY is the yield needed on an out-of-state municipal bond to match the yield available on an in-state municipal bond.

To calculate MEY, you need to first determine the municipal equivalent factor.

1/1-the effective state income tax = Municipal Equivalent Factor.

Using the hypothetical state with an income tax rate of 7% and an effective state tax of 5.04, the municipal equivalent factor is:

1/1-.0504= 1.0530

To determine the after-tax yield on the out-of-state bond, simply divide the above calculation (1.0530) by the yield on the out-of-state bond. If the out-of-state bond is yielding 5%, divide 5% by 1.0530 to arrive at 4.75%. If 4.75% is a higher yield than what's available in state, it makes sense to buy the out-of-state bond. Your Financial Advisor can help you calculate and determine whether an out-of-state bond makes sense for you or not.

Swapping

Investors in tax-exempt bonds have known for a long time that "swapping" can be a valuable financial tool for municipal bond portfolios. For example, you establish a capital loss by selling a bond at a lower price than your original purchase price or "adjusted" purchase price. (Note: such adjustments may occur when the bonds are purchased at a price other than par. Please consult your tax advisor.) The proceeds from this sale are used to purchase another municipal bond. This serves to reduce your current tax liability while preserving the objective of your portfolio.

You don't have to wait until year-end to establish a capital loss. Remember, too, that the scope of municipal bond swapping is not limited to tax swapping. You can often achieve several goals through swapping, including:

- Increasing annual tax-free income
- Upgrading the credit quality of bonds in your portfolio
- Shortening or lengthening the average maturity of your portfolio
- Providing for in-state tax-exemption (changing your residence from one state to another often dictates a portfolio restructuring because of state and local income tax implications.)

Call Provisions

Most municipal issues have a call provision which allows redemption before the stated maturity date. While the specific call provisions of any particular bond issue can vary widely, there are some basic types of bond calls: optional call, special or mandatory redemption and sinking fund redemption. Bonds can be called at par, at some premium above par, or in the case of zero-coupon bonds, at the compound accreted value (see glossary).

Risks

Fixed-income portfolios should be structured to balance after-tax yield against certain risk factors.

Market Risk-the risk that the market value of the portfolio might rise or fall, principally due to changes in prevailing interest rates. All other things being equal, a longer maturity bond is more volatile (i.e., "risky") than a shorter maturity bond, for a given change in interest rates. In a given maturity, a discount bond is more volatile than a premium bond.

Credit Risk-the risk that the issuer might be unable to pay interest and/or principal on a timely basis. A less severe form of credit risk is "downgrade risk"- the risk that the market value of a bond might erode, due to a reduction in the perceived credit strength of the issuer.

Although municipal bonds have historically been considered conservative investments, not every municipal bond has the same degree of safety. Furthermore, economic or political conditions in different states or counties can vary. That's why it's important to know the issuer's creditworthiness before you purchase a bond.

Reinvestment Risk-this may be the least well understood form of risk, and the one that has caused the greatest problem for most investors as interest rates decline. This is the risk that an investor's yield might decline as principal and/or coupon payments are re-invested. Reinvestment risk is very high on short-term instruments and is essentially nonexistent on long-term, non-callable zeros. Other bonds fall between these two extremes.

An investor's goal should be to balance these three forms of risk, taking into account any other constraints that the investor faces, proper asset allocation, cash flow requirements, risk tolerance and other available assets. This is one more compelling reason for proper asset allocation.

Weighing the Benefits of Municipal Securities

As discussed throughout this brochure, a properly selected municipal security can offer investors tax-free income. While receiving tax-free income may be your first consideration, municipal securities also offer investors a means to diversify their portfolios. Today, you can select from a variety of securities with different investment attributes including revenue source, maturity dates, coupon rates, credit ratings and call features.

In addition to being considered relatively conservative, most municipal securities are also very liquid. There is an active secondary market for most municipal bonds. Municipals are a "dynamic" investment that should be reviewed as needed to meet changing investment needs and market trends.

Investors should aim to balance these benefits against the risk and constraints described above. The more information you have, the better your decisions will be.

Before You Invest...Understand

This brochure has been written to enhance your understanding of some of the critical issues affecting your investments today.

We urge you to discuss your concerns and any questions you may have with your Financial Advisor.

Glossary

Accrued Interest — Interest earned on a bond from the last date interest was paid by the issuer/seller up to but not including the settlement date.

Alternative Minimum Tax (AMT) — Taxation based on an alternative method of calculating federal income tax intended to ensure that taxpayers are not able to avoid paying any federal income tax. For taxpayers subject to the alternative minimum tax, certain tax preference items, including interest on some private activity bonds, otherwise not subject to taxation are added to the gross income of the taxpayer for purposes of calculating the federal income tax liability.

Amortization of premium — For a bond purchased at a price above par (or above the accreted value on an Original Issued Discount bond), a portion of the premium is written down, or "amortized," each day prior to maturity. This adjustment reduces the "cost basis" price used in calculating capital gains or losses.

Assessed valuation — The total value placed on property for taxation purposes within a specified geographical area.

Basis point — A means of expressing yield as a percentage. Each basis point is 1/100 of 1%.

Bearer bond — The typical form in which municipal bonds were issued in the past, but no longer. Ownership is not registered, so the holder is presumed to be the owner. Because bearer bonds are fully negotiable, owners should take great care to provide for their safekeeping.

Bond — A debt instrument which pays a specified rate of interest periodically until the stated maturity.

Book entry — The most common way in which municipal bonds are issued. A single "global" certificate is created for each issue and ownership is electronically entered on the bond's depository record. Ownership is verified by confirmation and periodic account statements.

Callable bond — A bond that the issuer is able to redeem, prior to the maturity date. Typically, the first call date is ten years from the issuance date.

Certificates of Participation (COPs) — Simply stated, COPs represent a share in a lease agreement with a municipal or governmental entity and are usually subject to annual legislative appropriations.

Compound Accreted Value (CAV) — The compound accreted value is used as a starting point in determining the value of zero-coupon bonds. It includes all interest accrued from the time the bond was issued. In calculating the CAV, the yield to maturity at the issuance of the bond is held constant.

Coupon — States the nominal rate of interest which will be paid on a bond, almost always semi-annually.

Current yield — The relationship, stated as a percentage, between the price and the annual income of a bond. The current yield is found by dividing the coupon by the current market value of the bond.

Dated date — The specific date on each bond issue from which interest is originally accrued.

Debt service — The total amount of money required to meet the annual principal and interest payments when due.

Debt service coverage — For revenue bonds, a ratio of how many times the net projected revenues exceed the total annual debt service due in the same period.

Default — The failure of an issuer to promptly pay principal and/or interest when due or a failure to comply with any other covenant, promise or duty imposed by the bond indenture.

Discount bond — A bond that is selling, or was issued, at a dollar price below the par value.

Dollar bond — A bond that is traded and quoted at a dollar price rather than a yield to maturity; usually longer-term issues.

Double-barreled bond — A bond that is secured by a pledge of two or more sources of income (usually taxes and revenues).

Face amount — The par value of the bond.

General obligation — A bond backed by a municipality's full faith, credit and ability to levy taxes to meet the annual debt service expense.

Interest dates — The specific dates on which the bondholder receives interest income. Municipals typically pay interest semi-annually, usually on the 1st or the 15th of the month.

Interest rate — The annual interest paid. (Also called coupon rate.)

Issuer — The state, municipality or authority that is issuing the bonds.

Legal opinion — The written conclusions of bond counsel that the issuance of municipal securities and the proceedings taken in connection therewith comply with applicable laws, that the municipal securities are legal, valid and enforceable obligations of the issuer and that, in the case of tax-exempt bonds, interest on the bonds is excluded from gross income of the holders thereof for federal income tax purposes and, where applicable, from state and local taxation.

Limited tax bond — A general obligation bond secured by the pledge of a specified tax (usually the property tax) or category of taxes that is limited as to rate or amount.

Marketability — The measure of ease with which a bond can be sold either in the primary or secondary market.

Maturity — The date upon which the issuer repays the principal.

Official statement — A document or documents prepared by or on behalf of the issuer of municipal securities in connection with a primary offering that discloses material information on the offering of such securities.

Over-the-counter market — A market that trades unlisted securities, conducted by dealers through negotiation rather than through the use of an auction system such as the New York Stock Exchange.

Par value — The face or dollar amount of a security, usually $1,000 for a municipal bond (bonds are usually traded in multiples of $5,000)

Paying agent — The agent designated by the issuer to pay interest and principal; usually a bank or a trust company.

Premium — The amount by which a security is selling above its par (stated) value. Can also refer to the premium an issuer will pay to redeem bonds prior to maturity.

Pre-Refunded — A bond disuse designed to provide funds that will be set aside for the retirement of outstanding bonds.

Principal — The face amount or par value of a bond. Also used to define the market value of a bond, before adding accrued interest.

Ratings — Credit categories assigned by rating agencies that denote the various degrees of quality for a bond.

Registered bond — One of the common ways in which municipal bonds were issued. The owner's name will be on record as to principal only, or as to both principal and interest.

Revenue bond — A municipal security backed by earnings or revenues of a project (e.g., tolls for a bridge).

Secondary market — Trades in securities other than during the initial distribution by the underwriter or underwriting syndicate.

Self-supporting debt — Bonds sold for a project that will produce sufficient revenues to retire the debt.

Serial bonds — A portion of an issue of bonds that matures annually over a period of years.

Special tax bond — A bond secured by the revenues of a special tax (e.g., a gasoline tax).

Subdivision — A political entity legally authorized under the jurisdiction of a state, city, county, village, etc.

Swap — The exchange of one bond or group of bonds for another. Swaps are effective for a number of reasons, including: 1) establishing a tax loss; 2) improving portfolio quality; and 3) shortening or lengthening maturity.

Syndicate — A group of investment banking firms that agrees to underwrite or purchase a new bond issue and reoffer it for sale to the general public.

Underwriter — The investment banking firm that purchases an issue of municipal bonds from the issuer and resells them to the public.

Unlimited tax bond — A general obligation bond secured by a pledge of taxes that are not limited in rate or amount.

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