

Valuing Tax-Exempt Real Estate Bonds

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INTRODUCTION

IN TODAY'S CONSTRAINED LENDING ENVIRONMENT, tax-exempt real estate bonds are an important apartment financing option because of their low "all-in" costs (interest rates), extended maturity terms and potential assumption features. These bonds are generally only assumable on properties originally developed with them in place, but in some cases, are available for existing properties undergoing substantial renovation. This specialized financing cannot be duplicated in the marketplace and provides financial and non-financial benefits to a variety of associated parties. Municipalities are motivated to offer these bonds to encourage the development of blighted areas, increase the tax base and/or promote more affordable housing in high cost housing areas. Thus, investment in bond-financed apartments may be viewed as socially responsible investing. Investors of these properties also benefit from additional cash flow generated by the low-cost debt. Given their specialized nature, estimating the value of these bonds for acquisition, appraisal or accounting purposes requires an in-depth understanding of their characteristics.

TAX-EXEMPT BOND FINANCING HISTORY AND CHARACTERISTICS

In 1954, Congress enacted Section 103 of the Internal Revenue Code which allowed interest payments received on obligations issued by a state or a political subdivision of a state on behalf of a private, for-profit entity to be exempt from federal income tax. The Internal Revenue Service ruled in 1968 that interest received on such bonds would no longer be considered tax exempt, but Congress continued the exemption for industrial parks and "residential real estate for family units" with the Revenue

and Expenditure Control Act of 1968 and created subsection (b) to Section 103.

Although many of the multifamily units constructed after 1968 were for low- and moderate-income households, the law did not specify any income levels for the occupants. To alleviate concerns that tax-exempt financing was being used for the wealthy, Congress amended Section 103(b) (4) (a) in 1980, indicating that this type of financing should benefit low- or moderate-income households and encourage mixed-income projects. The definition of low- to moderate-income households was further refined in 1982 with the Tax Equity and Fiscal Responsibility Act (TEFRA). TEFRA states that low- and moderate-income individuals or families are those with incomes of 80 percent or less of the average area median income (AAMI). TEFRA requires that at least 20 percent of a property's units be rented to low- or moderate-income individuals.



About the Author

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This is known as a “set-aside” requirement. In practice, the 20/80 rule is a restriction on the operations of an apartment property, but generally proves not to be restrictive as renters-by-necessity, service and blue collar workers, as well as young professionals, typically have incomes that are in proximity to 80 percent of an area’s median income.

The Tax Reform Act of 1986 (TRA) amended Section 103 of the Internal Revenue Code by further constraining leasing on tax-exempt bond-financed apartment properties. The income set-aside requirements were changed to one of the following:

1. 20 percent of the units must be rented to individuals or families with 50 percent or less of the AAMI;
2. 40 percent of the units must be rented to tenants with 60 percent or less of the AAMI, or;
3. 15 percent of the units are rented to tenants with 40 percent or less of the AAMI.

These new tenant income requirements made tax-exempt bonds less attractive to developers and buyers looking to utilize this debt. Another aspect of TRA that made these bonds less attractive is that income from these bonds is now considered when calculating liability for the Alternative Minimum Tax (AMT). Bonds issued before TRA are not included for AMT calculations.

Compliance with the set-aside requirements is critical in order to retain tax-exempt financing. Leasing records documenting compliance with set-aside requirements must be kept. Depending on the demographics, median gross income of the area and rental levels, set-aside rents may need to be decreased to attract low to moderate renters. Failure to make timely reports will not affect the tax-exempt status of the bonds, but may subject the operator to fines. Note that some bonding authorities may impose restrictions greater than the federal requirements. Although laws regarding tax-exempt bond financing have changed, the original financing and requirements under which the bonds were first issued are typically retained. As a result, properties completed as late as the early 1990s may still be subject to the 20/80 rule since the bonds were originally issued prior to the implementation of the TRA.

KEY PARTIES TO THE ISSUANCE AND MAINTENANCE OF TAX-EXEMPT BONDS

Tax-exempt bond financing is a leverage strategy that allows an investor to access multifamily opportunities with low-cost financing. Given their attractive performance

characteristics, one would expect significant competition in acquiring these investments. Issues associated with the bonds, legal structure of the investment and management of the underlying properties, however, deter some investors. These obstacles create a less efficient market where the winning bidder is often not the highest bidder, but one with a demonstrated performance record in managing these properties and qualifying for the available financing. Interestingly, the market has appeared to consolidate in recent years, with fewer competitors willing to expend the resources necessary to move up the learning curve and gain the expertise in these investments.

Bond transactions involve many parties and are complex, specialized transactions that are time-consuming and relatively expensive. Each of the parties involved in the transaction often requires a payment for their services. The key players and their fees are highlighted below.

Issuer: The local government agency or bonding authority that issues the bonds and lends the proceeds to the developer. Bond assumptions and extensions require approval from the local authority. A fee of zero to 25 basis points is often added to the base interest rate to compensate the local government. One-time front-end charges such as attorney fees, third-party financial advisor fees and incidental costs are also typical;

Trustee: The entity hired by the issuer to monitor the transaction and insure compliance with the documents. A trustee fee is often charged.

Developer: The entity that builds the housing at a cost that would not be feasible without the benefit of the low interest rate on the bonds.

Borrower: The entity that buys the property at a price that would not be feasible without the benefit of the low interest rate on the bonds.

Remarketing Agent: An entity responsible for periodic remarketing and re-pricing of the interest rate over the life of the bonds; also assists in reviewing the bond documents. A typical expense for the remarketing agent would be an initial fee of 25 basis points and an annual fee of 7.5 to 12.5 basis points.

Credit Enhancer/Liquidity Agent: The credit enhancer issues a letter of credit or guarantee in favor of the bond holders in return for an annual fee. The credit rating of the bonds reflects the credit rating of the credit enhancer. Generally, the fee varies according

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to the risk profile of the underlying property. The fee can range from 50 basis points for preferred customers up to 350 basis points, but typically is 150–250 basis points. This fee, however, can vary significantly depending on conditions in the credit markets. The liquidity agent is typically the credit enhancer and provides a source of funds to pay off investors who have exercised their right to sell the bonds when a new buyer has not yet been found by the remarketing agent. Demand for these bonds, however, is typically strong.

Rating Agency: The entity that assigns a credit rating to the credit enhancer and consequently to the bonds. An initial fee to rate the credit enhancer and an annual fee to update their credit rating are typically passed on to the borrower. An annual fee of \$2,000 is common for this service.

Investors: The bond and note purchasers that benefit from the federal, state and, sometimes, local tax exemption.

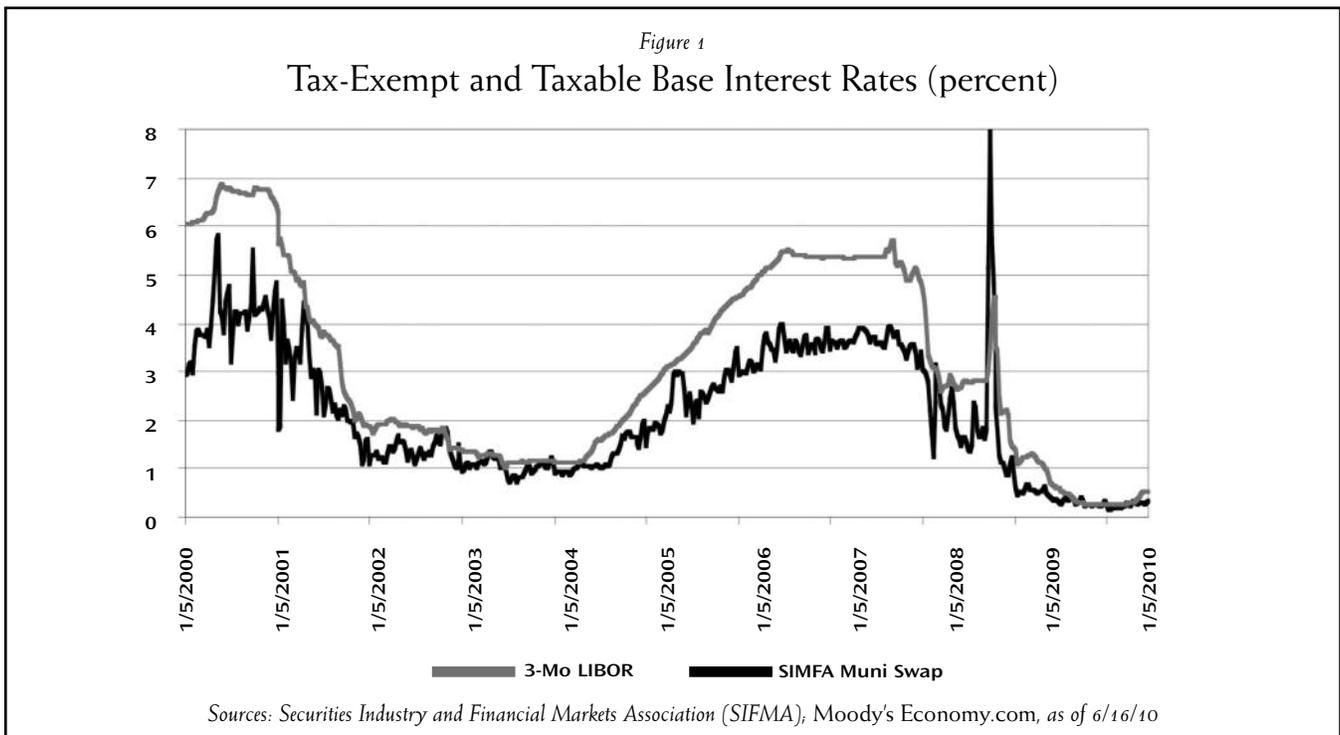
Underwriter: The investment banker that prices, structures and sells the bonds. The underwriter guarantees the sale of the bonds and therefore assumes the risk that the bonds will not sell. This fee is typically paid at the outset and is not a recurring expense.

Servicer: The entity responsible for invoicing and servicing the loan on behalf of the credit enhancer or lender. A servicing fee is typical.

TAX-EXEMPT AND TAXABLE FINANCING COMPARISONS

Tax-exempt bonds are unique forms of real estate financing. The impact and value of this financing can be better estimated by comparing it with the most similar market financing available. Since these bonds are typically variable rate, comparing them with market variable rate loans enables us to quantify their differences. A good proxy for the historical base interest rate on tax-exempt variable rate bonds is the Securities Industry and Financial Markets Association (SIFMA) Municipal Swap Index, found at www.sifma.org. Receiving data from 80 remarketing agents, the index consists of high-grade variable rate municipal bonds. It was created in 1991 and covers the time period from July 1989 to the present. A good proxy for the base interest rate on taxable floating rate financing is three-month LIBOR (London Interbank Offered Rate).

Figure 1 highlights the relationship between the SIFMA Muni Swap Index and three-month LIBOR. The data indicates weekly rates for both indices from 7/5/89 to 6/16/10. Average three-month LIBOR during this period was 4.37 percent. By comparison, the average SIFMA tax-



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exempt interest rate was 2.94 percent. The average interest rate difference between the two indices was 1.42 percent. As a rule of thumb, the ratio of the SIFMA rate to three-month LIBOR is 2:3. In other words, the SIFMA rate is typically 67 percent of three-month LIBOR.

TAX-EXEMPT BOND RATE STACK

Although the SIFMA Muni Swap Index and three-month LIBOR are good proxies for tax-exempt and taxable financing, respectively, the fees (“rate stack”) associated with the key parties to the bond transaction must be added to the SIFMA rate for a total cost of bond financing, and a lender spread must be added to three-month LIBOR to achieve an all-in cost for taxable financing. The required rate stack for bond financing has historically been significantly less than the required spread for taxable financing. Today, the rate stack for bond financing typically ranges from 150–250 basis points; it is generally 300–400 basis points for conventional variable rate financing today. Recent experience indicates that the all-in costs for apartment bond financing and conventional variable rate financing are below three and five percent, respectively.

In addition to the recurring fees associated with some of the parties to the bonds, an adjustment to bond quality also may be necessary. The SIFMA index is based on higher quality bonds than are typical for tax-exempt real estate bonds. As a result, an adjustment, typically 5–10 basis points, should be made to reflect the lower credit of these bonds relative to the SIFMA index. Figure 2 details a rate stack that is representative of bond-related costs from recent transactions.

Figure 2

Tax-Exempt Bond Rate Stack Fee Schedule	
Enhancement/Liquidity	1.10%
Servicing	0.15%
Remarketing	0.07%
Issuer	0.10%
Trustee	0.03%
Bond Quality	0.08%
Other Adjustment	0.00%
Total	1.53%
Total (Rounded)	1.50%

Source: Author's Calculation

TAX-EXEMPT BOND VALUATION

Tax-exempt bond-encumbered apartment properties tend to sell at a premium over conventionally financed multi-family assets because of the lower interest rate on the bonds compared with conventional apartment financing. For bond-financed assets, the real estate is generally valued separately from the bonds. Qualitative and quantitative factors are used in the bond valuation process. Factors that influence the valuation of the tax-exempt financing include the following:

1. **Market Conditions** – For example, in 2009, the credit crisis placed additional risk on real estate lending. While assumable tax-exempt financing remained extremely attractive, long-term enhancement was more risky because of the shrinking supply of bond enhancement from the recognized market providers.
2. **Bond Enhancement Market Provider Analysis** – For example, Merrill Lynch uses a 15 percent discount to market cap rates to account for the value associated with the tax-exempt bonds. This analysis should be a consideration in an investor’s bond valuation process.
3. **Remaining Term of Debt** – One of the appeals of buying a property with bond debt is its considerably longer term compared with conventional debt. The term for conventional debt is typically 5–7 years versus 20–30 years for bond debt. In addition, there typically is an ability to extend the maturity date of tax-exempt debt with issuer approval. Issuers are also generally motivated to extend the term of the bonds in an effort to continue to provide moderate income housing.
4. **SIFMA/LIBOR** – In general, the spread between rates associated with conventional variable rate debt (LIBOR) and variable rate bond financing (SIFMA) is expected to widen as rates increase. As LIBOR currently remains at historically low levels, lenders have implemented floors on their base conventional lending rates so that current spreads to tax-exempt financing remain wide. Variable rate tax-exempt bond financing is expected to continue to provide the lowest cost means of financing apartment investment opportunities.
5. **State and Double Taxation** – Standard bond valuation assumes federal income tax avoidance only. For

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states with a state income tax, especially higher income tax states like California, New York and Connecticut, the value of tax-exempt income can be higher if the bonds are sold exclusively to residents of the state of issue. As a result, the state of issuance can influence the interest rate on tax-exempt real estate bonds.

6. Discounted Cash Flow (DCF) – A 10-year DCF analysis can be used to quantify the benefits of tax-exempt over conventional financing. Potential additional risks/benefits identified by the qualitative factors listed in 1–5 above may warrant an adjustment to the discount rate used in the analysis.

7. Transaction Comparison (Bond Pipeline Analysis)
An analysis of underwritten bond deals provides insight into the value that investors (or potential buyers) place on bond financing. Generally, this transaction information has provided evidence that buyers are willing to pay more than the fee simple value of the real estate in order to acquire these properties.

The market values bonds in various ways. Using the same general assumptions (Figure 3), two different techniques are used in this article to estimate the value of tax-exempt real estate bonds (Figures 4 and 5). The examples assume that the average tax-exempt and conventional variable interest rates are equal to the average weekly SIFMA rate and three-month LIBOR from 7/5/89 to 6/16/10, respectively. The SIFMA average was 2.94 percent; it was 4.37 percent for three-month LIBOR. When valuing a particular tax exempt bond, currently available financing terms should be used. Although the required bond-financing rate stack historically has been significantly less than the required lender spread for taxable financing, both variables are assumed to equal 1.50 percent for simplicity. Figure 4 uses a capitalization rate and assumes that the bonds are extendable into perpetuity. Figure 5 uses a discounted cash flow analysis that is akin to the acquisition of real estate with expected cash flows and a reversion. It assumes that tax-exempt bond benefits are available through the property holding period, accounting for debt service savings, as well as the reversion value of the bonds.

Figure 3
Assumptions for Examples

Tax-Exempt Bond Terms:	
Principal	\$ 10,000,000
Average Tax-Exempt Variable Interest Rate	2.94%
Tax-Exempt Bond Rate Stack	1.50%
Effective Tax-Exempt Variable Interest Rate	4.44%
Average Taxable LIBOR Variable Interest Rate (ATLVIR)	4.37%
Taxable Required Lender Spread over LIBOR	1.50%
Effective Taxable Conventional Variable Interest Rate	5.87%
Bond Term	25 years
Average Annual Interest-Only Bond Debt Service	\$ 444,000
ATLVIR Interest-Only Conventional Debt Service	\$ 587,000
Savings by Using Tax-Exempt Bond Financing	\$ 143,000
Less Recurring Annual Fees:	
Rating Agency	\$ 2,000
Other Municipality Fees	\$ 5,000
Net Savings by Using Bond Financing	\$ 136,000
<i>Source: Author's Calculation</i>	

While the selection of appropriate capitalization and discount rates is often difficult, typical property market discount and capitalization rates are generally used in the bond valuation process. Tax-exempt bonds are long-term and extendable. Although their term may run out, municipalities are motivated to extend the life of these bonds. In extending the bonds, municipalities continue to provide housing for low- and moderate-income households, but may extract concessions and fees from the borrower at the time of extension. Due to the bonds' long life and extension features, capitalization rates from market real estate transactions are arguably appropriate for valuing the debt service benefits into perpetuity. Discount rates from acquisitions of similar unleveraged properties would also be a good proxy for valuing the income stream.

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Figure 4

Computing the Market Value of Tax-Exempt Bonds by Capitalization Rate

Net Savings by Using Bond Financing	\$ 136,000
Capitalization Rate	7%
Estimated Bond Value	\$ 1,942,857
<i>Source: Author's Calculation</i>	

In Figure 4, the bond premium is calculated using a capitalization rate and estimated to be almost 20 percent of the outstanding bond principal balance. Given the assumption of the debt service benefits going into perpetuity, this analysis can be viewed as identifying an estimated high water mark for the value of the bonds.

Figure 5

Net Savings by Using Tax-Exempt Financing

Net Savings by Using Tax-Exempt Financing	\$136,000
Discount Rate	9%
Holding Period	10 years
Estimated Debt Service Benefits	\$872,801
Reversion Capitalization Rate	8%
Reversion Value (\$136,000/.08)	\$1,700,000
Less: Bond Extension Cost	\$200,000
Estimated Bond Reversion Present Value	\$633,616
Estimated Bond Value	\$1,506,417
<i>Source: Author's Calculation</i>	

In Figure 5, the cost of extending or assuming the bonds at the time of reversion is incorporated into the discounted cash flow analysis by subtracting it from the capitalized bond reversion value at the end of the holding period. In this instance, the bond premium is estimated to be slightly more than 15 percent of the outstanding bond principal balance. This estimate is consistent with experience in recent years. As a percentage of the outstanding principal balance, bond premiums have tended to be in the mid-teens.

CONCLUSION

Tax-exempt bonds offer an opportunity to improve apartment investment returns through the use of low-cost financing. Given tax-exempt bonds' attractive characteristics, evidence indicates that sophisticated investors are willing to pay a premium for bond-financed apartment properties. Whether for acquisition or ongoing reporting purposes, accurately valuing tax-exempt real estate bonds requires knowledge of how they work. Although the methods of estimating the benefit of this financing and its value are demonstrated herein, these estimates of value should be rigorously tested against market evidence to verify that the conclusions are supported by the market. ■

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