

# Municipal Bonds: Understanding the Fundamentals



## MARKET COMMENTARY

SEPTEMBER 2014



**RECENT FOCUS ON MUNICIPAL BONDS AND THEIR CREDIT QUALITY** emphasizes the importance of understanding the nuances of the municipal market. Investors with this knowledge will be better equipped to identify risks within this asset class. One important factor in determining which municipal bonds may be appropriate for an investor are the differences in pledged repayment sources. This paper will outline key differences between two common repayment pledges: tax-supported bonds and revenue bonds.

The sources of pledged revenue for bond repayment are diverse and often times complicated. Broadly speaking, pledged revenues fall into two basic categories: taxes, which support securities such as general obligation (GO), income tax and sales tax bonds, or project related revenues that support revenues bonds. The former tend to be issued by states and local governments and the latter by utilities, transportation agencies, and health care providers. In the examples below, we focus on general obligation bonds issued by local governments and revenue bonds issued by essential service utilities.

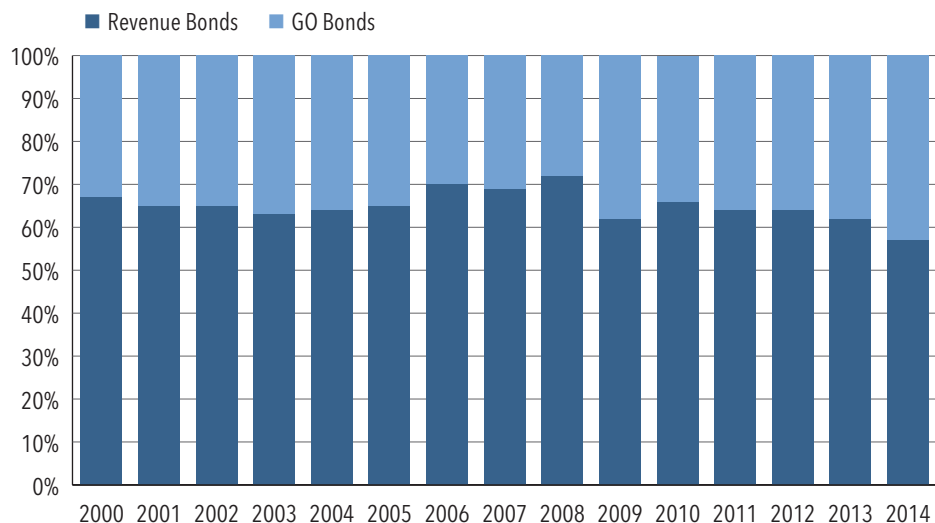


**Beth Dougherty**

*Vice President,  
Senior Research Analyst  
Nuveen Asset Management, LLC*

## Municipal Bond Issuance: Revenue vs GO

(based on par amount at issuance)



\*2014 data is January through August only.  
Source: The Bond Buyer/Thomson Financial Yearbook, 2008 and The Bond Buyer, 2014.

Quick Facts	2013	2014*
Total Municipal Bond Issuance:	\$333.8 billion	\$203.4 billion
Total Revenue Bond Par Amount:	\$206.0 billion	\$116.7 billion
Total General Obligation Par Amount:	\$127.8 billion	\$86.7 billion

\*2014 data is January through August only.

Source: The Bond Buyer, 2014.

## General Obligation Bonds

General obligation (GO) bonds are loans backed by a state or local government's full faith and credit, generally including its authority to levy taxes, most often property taxes. Frequent issuers of GO bonds are states, counties, cities and school districts. For states, this constitutes a pledge of its primary operating fund, or General Fund, receipts. For the local governments, the GO pledge is most commonly a covenant to levy property taxes to repay principal and interest, and therefore, the debt service due on a general obligation bond is supported by property tax collections. Failure to pay a property tax bill can lead to the loss of title to the property, providing a strong incentive for payment of property taxes and thereby making the payment stream for debt service fairly secure.

When a local government issues bonds backed by its pledge of property taxes, the security is often referred to as an *ad valorem* tax pledge. The ad valorem tax pledge can be limited or unlimited as to the rate applied or the amount collected. If the pledge is unlimited, there are no constraints on the municipality's ability to raise taxes to pay debt service. However, the ability to issue unlimited tax debt often requires voter approval and therefore can be more difficult to issue than limited tax debt. Also, the tax levied for these bonds can only be used to pay debt service. The revenues cannot be used legally for any other purpose. If the tax pledge is limited, the municipality may only increase the property tax up to a certain rate and/or dollar amount. The issuance of limited tax bonds does not usually require voter approval and, depending on the legal structure, the tax collections may or may not be redirected to other expenditures.

The credit analysis of an issuer's general obligation bonds focuses on four key factors: local economy and socio-demographics, health of financial operations, debt profile, and the strength of management of the issuer. As GO bonds are typically backed by property taxes, the health of the local tax base and economy is an important indicator of its ability to support debt repayment. The issuer's financial position provides a picture of what services the local tax base is (or is not) able to support as well as management's effectiveness of working within certain economic and/or political constraints. A municipality's debt profile will reflect how much, or little, debt it is already carrying and its capacity to meet additional borrowing needs. The analysis of management often goes hand in hand with the previous three factors as internal policies and historical practices regarding economic development, financial operations, and debt issuance reflect strength of management.

Though certainly not exhaustive, some common questions examined as part of the GO analysis are:

- Where is the municipality located? What is the size and composition of the tax base? What is the socio-demographic profile of its residents?
- How healthy is the employment base? Is there concentration in any given industry or employer?
- What is the trend of financial operations? Is this supported by internal policies? Does the municipality retain any financial flexibility or reserves?
- How leveraged is the tax base and could it support additional borrowing?

While general obligation bonds represent a very strong pledge, they are not completely free from any challenges. Spending and policy agendas are authorized by elected officials, be they governors, mayors, city councils, or school board officials. As a result, political pressures can influence budgetary decisions to raise taxes and/or cut costs. Though ad valorem general obligation bonds often benefit from a legally designated debt service levy, there are occasions when this levy is abated and other available revenues are applied to debt service. In this instance, when there are downswings in the economy and those other revenues are no longer sufficient to cover debt service, management will face the decision to raise its overall property tax levy or make other operating cuts to accommodate debt service. As recent debate has shown, both options can be politically challenging.

## Essential Service Revenue Bonds

Essential service utilities provide critical services such as water, sewer, and electricity. They are considered essential services due to their importance in maintaining public health and safety, and providing infrastructure that promotes economic growth. The revenues generated by these utilities are primarily user fees, wholesale contracts, connection fees, and investment income. The fees and contracts are set by the utility, though in some states there may be an oversight entity that must approve rate increases, which could limit the ability to raise revenues.

A revenue bond is secured by either a gross revenue pledge or a net revenue pledge, with the latter being more common. A gross revenue pledge promises to pay bondholders prior to any other expenditure. Under a net revenue pledge, the utility's operation and maintenance expenditures are paid prior to debt service. As

bondholders are ultimately dependent on the system to generate additional revenue for future debt service, it is reasonable that operations and maintenance be paid prior to debt service so that the system remains functional over the long term.

When issuing revenue bonds, the utility makes legal commitments – known as covenants – such as the structuring of rates, the order in which revenues will be applied across various expenditures (including debt service), and requirements for issuing additional bonds. The strength of these covenants, the revenue pledged, and the credit characteristics of the issuer are all important factors in determining a bond's creditworthiness. Analyzing these characteristics of an essential service revenue bond is somewhat similar to analyzing a general obligation bond. In the analysis of a revenue bond, we examine the qualities of the customer base and physical infrastructure, health of financial operations, debt portfolio, and quality of management. While the general factors are similar to that of GO bonds, the supporting traits are quite different. Instead of looking at the size and composition of the tax base, the diversity and size of the customer base is examined because it directly affects the strength of billing collections. Notably, the largest customers of the enterprise system, consuming the greatest volume of services, may not be the ones that pay the most. Also, the service area of an essential utility can extend far beyond the boundaries of a municipality and may provide wholesale service to other nearby municipalities.

When examining the ability of a utility to cover its expected debt service, an analyst will consider:

- Who are the major users and largest billing accounts? Is there a concentration of industry or any single user? What is the size and growth trend of customer accounts?
- How competitive are rates, and does management have the willingness and ability to raise them? How strong are reserves compared to operation and maintenance expense?
- What is the ratio of net revenues to annual debt service and maximum annual debt service?
- How much debt has the utility taken on, and are there additional capital needs?

Most often, these utilities are legally tied to a local government, like a city water department, making them subject to the same management that oversees the general municipal operations. In such cases, it is rare that the essential service revenue bond

would be considered to be of higher credit quality than the municipality's general obligation pledge, in part because they likely share the same management team. However, on occasion, it is deemed that the revenue bond will be considered the stronger of the two credits. The city of Toledo (OH) and its water utility is one such example. Moody's Investors Service has public ratings of A2 on the city's general obligation bonds and Aa3 on the water revenue bonds, indicating that the rating agency likely believes the water revenue bonds to be of higher credit quality.<sup>1</sup> Though not specifically identified by the rating agency, reviewing the two reports reveals three important points:

- The water utility's service base extends far beyond the city. Toledo's customer base accounts for only 59% of water consumption; remaining demand is from customers in three Ohio counties and another in Michigan.
- The water utility's financial operations appear to be in better shape than the city's general operating funds. Moody's describes the city's General Fund as "challenged."
- The utility is a closed loop system so it is protected from the city raiding its funds.

A major limitation of essential service revenue bonds is that revenues are dependent on what the utility can generate through user and other fees. There is no taxing authority to back the bonds. Also, revenues and expenditures can be volatile due to

weather events, slowdown in development resulting in lower connection fee revenues, or a change in supply costs. Adjusting rates mid-year to increase revenues is not always possible as rates in some states must be approved by another agency or regulatory body. Like property taxes, increases in utility rates can also be politically challenging due to their essential nature.

## Conclusion

As investment opportunities, general obligation and revenue bonds each provide relative value and risk. Understanding the basic differences of these bonds can provide a solid foundation upon which to build an appropriate strategy for an investor considering municipal bonds. The key to balancing these securities within an investor's portfolio is to understand their investment goals and support those goals with fundamental credit research. ■

---

**For more information, please consult with your financial advisor and visit [nuveen.com](http://nuveen.com).**

<sup>1</sup> Moody's Investors Service: New Issue Report, City of Toledo (OH), September 11, 2014. Moody's Investors Service: New Issue Report, City of Toledo (OH) Water Enterprise, May 29, 2013.

### RISKS AND OTHER IMPORTANT CONSIDERATIONS

This information represents the opinion of Nuveen Asset Management, LLC and is not intended to be a forecast of future events and this is no guarantee of any future result. It is not intended to provide specific advice and should not be considered investment advice of any kind. Information was obtained from third party sources which we believe to be reliable but are not guaranteed as to their accuracy or completeness. This report contains no recommendations to buy or sell specific securities or investment products. All investments carry a certain degree of risk, including possible loss principal and there is no assurance that an investment will provide positive performance over any period of time. It is important to review your investment objectives, risk tolerance and liquidity needs before choosing an investment style or manager.

The risks of investing in municipal bonds include, but are not limited to, interest rate risk and credit risk. The value of, and income generated by debt securities will increase or decrease based on changes in market interest rates. As interest rates rise, bond prices fall. Credit risk refers to an issuer's ability to make interest and principal payments when due. This risk is heightened for longer-term bonds. Below investment grade bonds carry heightened credit risk and potential for default.

Nuveen Asset Management, LLC is a registered investment adviser and an affiliate of Nuveen Investments, Inc.