

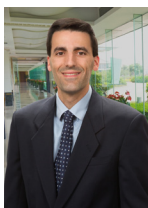
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The Advantages of Municipal Revenue Bonds

Stable credit characteristics and potential yield advantage build a case for favoring revenue bonds over general obligation bonds



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Executive Summary

- ▶ Revenue bonds comprise around two-thirds of the municipal bond universe and provide stable quality and attractive income from debt financings of vitally essential projects.
- ▶ We believe that fundamental credit risk for most revenue bonds is stable in weak economic periods due to the essentiality or quasi-essential nature of the project.
- ▶ Revenue bond issuers ("public corporations") are not as labor intensive as state/local governments, and therefore are not experiencing the growing pension-funding gaps, which may have negative implications for general obligation (GO) debt.
- ▶ Infrastructure financing in the US has long relied on the municipal-bond market, with revenue-bond issuance a key source of funding for those projects.

Compelling Advantages of Municipal Revenue Bonds

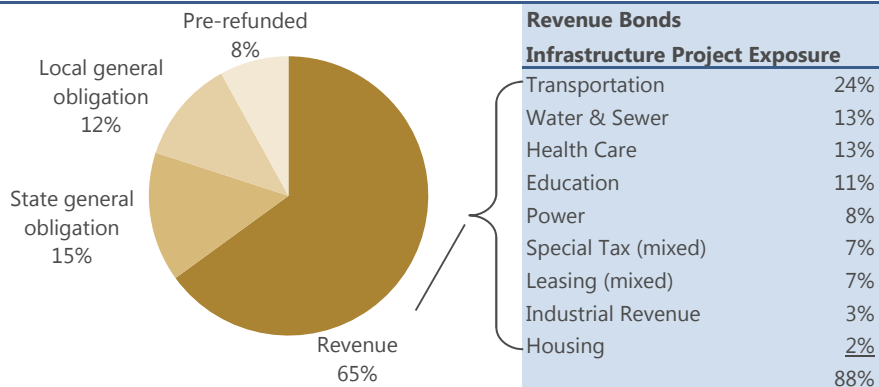
When investing within the large and diverse municipal-bond market, with \$3.8 trillion of municipal debt outstanding and over 50,000 issuers, investors must generally choose between two broad categories of bonds: revenue and general obligation. Both represent high-quality investments; however, there are several fundamental reasons why Standish favors revenue over GO bonds.

Revenue bonds fund a wide variety of public projects, including: toll roads, bridges, water and sewage plants, electric systems, airports, hospitals and public universities, among many others. From a fundamental-credit standpoint, many of these "public corporations" are virtual monopolies which deliver services with inelastic demand. Therefore revenues are extremely reliable, even during weak economic cycles.

- ▶ Revenue bonds are supported by dedicated income streams from specific projects and sources. Each bond issue requires detailed credit analysis to identify and assess its unique risks and characteristics.
- ▶ Disclosures and financial reporting from revenue-bond issuers are often more frequent and transparent than those of many local-government GO issuers.
- ▶ While revenue-bond issuers lack the taxing power of state and local governments, issuers generally have the ability to raise rates and fees to maintain financial performance and meet bond covenants.

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Revenue Bonds Make Up About 2/3 of the Muni Market



Source: Standish, Bloomberg Barclays Muni Index as February 28, 2017

General-obligation bonds are backed by the 'full faith and credit' pledge of the issuer, supported by taxes and fees. State GOs are mainly supported by sales and income taxes, while local GOs are backed heavily by property taxes.

- ▶ Tax revenues supporting GO bonds are tied to economic cyclical.
- ▶ Because GO bonds are backed by taxes paid by the public, voter approval is often required to raise taxes.
- ▶ Stock market volatility has implications for those issuers heavily dependent on capital-gain tax revenues.

Rising Pension Burdens for GO Issuers

Compared to revenue-bond issuers, state and local GO municipalities are more labor-intensive, which fuels a greater proportion of revenue share needed to cover pension and healthcare costs. This gives rise to fiscal challenges, particularly for those issuers lacking the financial flexibility to effectively meet escalating pension liabilities by either increased contributions, raising tax revenues, issuing debt or reducing expenses.

While there has been widespread pension reform among state and local GO issuers, we expect costs associated with pension and other post-employment benefits, such as health care, to continue to outpace revenue growth. Furthermore, rating agencies have seemingly increased their emphasis on pension-funding levels, leading to more negative-rating actions in recent years.

Political Autonomy Is a Plus

We carefully examine the vacillations of the political environment to ensure state and local administrations are driving prudent fiscal management; realistic budget forecasts, willingness to take remedial steps to raise taxes and/or implement spending cuts, and pass timely budgets and legislation. The willingness is increasingly as important as ability to pay.

We believe that essential-service revenue bonds are insulated from political risk due to professional management, frequent independent rate-setting ability, dedicated tax-revenue streams and operations, which are separate and distinct from the general government.

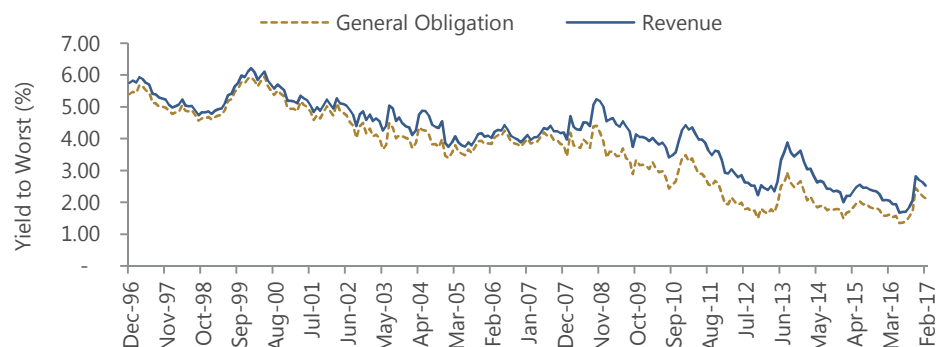
Special Revenue Bonds a Hidden Gem in Unlikely Event of Bankruptcy

In a rare municipal bankruptcy, as it pertains to revenue bonds, we find that security pledge matters. The credit quality of a revenue bond is often bolstered by the issuer's ability to increase user fees and rates in the event that the dedicated revenue stream falls short of projections. Special revenue bonds also have sole rights to dedicated revenue streams, and are insulated from a state or local government insolvency. We particularly see relative value in "special revenue" bonds. Standish favors these bonds particularly when market pricing does not assign a premium to reflect this protective covenant. The bankruptcy code lists several types of special revenue bonds, of which Standish focuses on those payable from revenues of municipal utilities (water, sewer or electric) and those backed by special excise taxes.

Revenue Bond Excess Yield a Key Advantage

Municipal revenue bonds potentially offer a yield advantage versus GO issues, which makes them attractive from a relative value standpoint. Due to a lack of familiarity and analytical credit expertise amongst the largest buyer base of municipal bonds, retail investors, demand for revenue bonds is less robust resulting in higher yields than would be justified by the sector's strong credit fundamentals.

Revenues Historical Higher Average Yields vs. GOs



Source: BAML, Standish as of February 28, 2017

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Conclusion

At Standish, we believe a targeted allocation toward both general obligation and revenue bonds is paramount when seeking to achieve optimal portfolio sector and credit diversification. Both security types, with their differing repayment sources, carry various levels of risk that can be addressed with thorough fundamental and quantitative analysis. We further believe an overweight bias toward revenue bonds versus GO is warranted based on the revenue sectors' more stable credit characteristics, along with attractive relative yield profile. We focus heavily on issuers in economically strong service areas with solid credit characteristics and bond income sources that are better insulated from economic slowdowns.

Revenue vs. GO Bond Comparison - Key Factors

	General Obligation	Revenue
Pensions	Rising retiree costs, such as pension & health care, can cause budget stress and crowd out spending	Less pension exposure, as issuers are generally less labor intensive
Default/Bankruptcy	States as well as approximately 50% of local governments, cannot file for bankruptcy	Defaults/bankruptcies remain rare, concentrated in non-essential purpose issuers.
Economic Risk	Cyclical tax revenues sensitive to economic swings	Predictable income / stability in weak economy
Political Risk	Political considerations drive fiscal management / failure to pass budgets & legislation, reluctance to raise taxes or reform pension system	Professional management, dedicated revenues and separate operations from local government
Bond Covenants	Unlimited taxing power	Special revenue status secures protection in the event of local GO bankruptcy
Excess Yield	Retail-investor demand is heavy which compresses yield/spread levels	Lack of analytical expertise among retail leads to wider spreads

Source: Standish as of March 31, 2017



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