

Not All Local General Obligations Are Created Equal

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The aim of this paper is to distinguish between the general obligation (GO) securities of local government issuers of different states. The paper is divided into three parts:

Security structure deals with the legal security provisions that support local GO bonds. Understanding the security structure is paramount in making a distinction between a GO bond that is secured with a pledge of property tax revenues and a bond that is secured with issuer general funds. We score each state's local GO security based on five characteristics. This framework allows for a comparison of the strength of the local GO security in different states.

Municipal bankruptcy deals with the necessary conditions for filing, offers some examples of municipal bankruptcies and defaults with an emphasis on GO securities, and discusses lessons learned from Detroit's experience.

State oversight describes some general approaches that many states use to support local governments experiencing fiscal distress. The instances of prior interventions, while relatively infrequent, show a sharp contrast with the rarity of actual defaults and bankruptcies, suggesting a tendency on the behalf of many states to limit or avoid bankruptcy as an option.

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Authors

Thomas DeMarco, CFA®
Senior Vice President
Fixed Income Market Strategist
Fidelity Capital Markets

Ilya Perlovsky, CFA®
Vice President
Fixed Income Market Strategist
Fidelity Capital Markets

Security structure

General obligation bonds issued by local governments can have a variety of structural characteristics that differentiate them by state, as well as by the type of government (city, county, school district, or special district). We identify six key structural features that local GO bonds may or may not possess, including (i) a dedicated pledge of ad valorem tax (property tax) revenues (either limited or unlimited), (ii) a general pledge of all available revenues (i.e., a “full faith and credit” pledge), (iii) a separate property tax levy dedicated for debt service, (iv) a separate fund that holds pledged property tax revenues, (v) a statutory lien on the pledged property tax revenues, and (vi) a voter approval requirement to issue bonds.

A dedicated pledge of ad valorem tax revenues that secures a local GO bond may be limited or unlimited. Bonds secured with an unlimited ad valorem tax pledge are referred to as unlimited tax general obligation (ULTGO) bonds. If the property tax pledge is limited by state law, the bonds are referred to as limited tax general obligation (LTGO) bonds. Many states have laws limiting the amount by which assessed property values may be increased in any given year. Limits on assessed value increases may be substituted by or paired with harder limits on the actual property tax levy. However, most states that do have these limits in place either automatically exempt local GO debt service from the limits, or offer local voters the option to override the limits through a referendum approving any new ULTGO debt. While an unlimited tax pledge may be preferable, it does not necessarily render LTGO bonds materially inferior, as local governments often maintain ample room under the applicable limit to raise ad valorem taxes as needed.

A local government may, in addition to or in lieu of a dedicated property tax pledge, provide bondholders with a general pledge of all available revenues. Such a pledge is often referred to as a “full faith and credit” pledge. Notwithstanding any statutes to the contrary, such a pledge is considered to be unsecured because no specific revenues are pledged to bondholders. While some states may define “full faith and credit” in a statute

as a pledge of specific revenues, for the purposes of this paper it is considered an unsecured obligation of the issuer. To the extent that there are no specific property tax revenues pledged, the terms LTGO and ULTGO are not applicable, and such bonds may simply be described as a “full faith and credit” GO bond.

Another important structural element of a local GO bond is the requirement that a separate property tax levy be dedicated for debt service. When such a feature is combined with the requirement that the pledged property tax revenues be held in a separate fund apart from the issuer’s general funds, it provides an important structural safeguard to bondholders. For example, when debt-service funds have been segregated with the explicit condition that said funds be solely expended for debt service, these funds may be shielded from potential demands on a local government’s general funds, which the government may not be able to satisfy in a timely fashion.

The segregation-of-funds feature of a local GO security may be further strengthened with a statutory lien on the ad valorem tax revenues. A true statutory lien is considered to be a perfected statutory claim on the property tax revenues that have been pledged as security to bondholders. A true statutory lien may provide bondholders some protection in a municipal bankruptcy (which is covered in greater detail in the next section of this paper). The reason a statutory lien may be important in bankruptcy is that the debt may be considered “secured” and may stand to receive a higher recovery value in a restructuring than the issuer’s unsecured debt, although this is by no means an assured outcome. Local GO bonds secured solely with a full faith and credit pledge, LTGO bonds in certain states, or other forms of debt such as certificates of participation may be considered to have a lower payment priority or may even be determined to be unsecured claims and, therefore, rank lower than an issuer’s ULTGO bonds that have strong structural features, such as a statutory lien. Nevertheless, ULTGO bonds, even when supported by strong structural features, may still be considered unsecured debt in bankruptcy.

A voter approval requirement to issue GO bonds places an additional constraint on a local government's ability to leverage its tax base. However, in some states that have voter approval requirements for GO bonds (typically, for ULTGO bonds), issuers have the option of circumventing those restrictions by issuing other forms of debt, including, in many cases, LTGO bonds. For example, certificates of participation are a common form of debt in California (although California local governments do not have the ability to issue LTGO bonds backed with limited ad valorem tax revenues), and certificates of obligation are common in Texas. Additionally, the ULTGO security may not exist in some states due to state-law restrictions on indebtedness, or may be extremely rare because restrictions, such as voter approval requirements, place an excessive burden on local governments that do not frequently access the capital markets.

Security structure is only one factor to consider when evaluating credit quality. Thus, while it is preferable to have a strong legal framework behind a local GO security over a weaker pledge of general revenues, it is ultimately the overall credit quality of the issuer that should concern investors in GO bonds. Even an issuer in a state that has strong local GO bond protections could experience severe fiscal distress or file for bankruptcy, and, conversely, a comparatively weak GO structure could underlie the bonds of an otherwise supremely creditworthy borrower. Naturally, investors should **prefer the bonds of issuers that have a strong ability and willingness to pay over those that do not, regardless of the security structure, all other things being equal.**

The appendix (on page 9) provides a table of the key structural characteristics that apply to the local GO bonds of cities, counties, and school districts in all 50 states. We separate the ULTGO and LTGO securities for these three main types of local government issuers and score their strength on a scale of 0–5, where a higher number equals a stronger security structure.

Municipal bankruptcy

Local government bankruptcies have been rare historically, and one of the reasons has been the strict eligibility requirements. In order for a court to accept a petition from a local entity seeking protection from creditors, the local entity must first meet the following conditions:¹

1. The debtor is a "municipality," as defined under Section 101(40) of the Bankruptcy Code (the "Code").
2. The municipality is located in a state that authorizes Chapter 9 filings (see the map on page 6).
3. The municipality is insolvent (insolvency is measured through a cash-flow test for municipalities).
4. The filing by the municipality is voluntary; involuntary filings are prohibited.
5. The municipality
 - i. has either obtained the agreement of a majority of creditors that it intends to impair;
 - ii. has negotiated in good faith with creditors and failed to obtain agreement;
 - iii. has demonstrated that it is impractical to negotiate; or
 - iv. has demonstrated that a creditor is attempting to obtain a preference.

Many municipalities do not qualify for bankruptcy simply because they are located in states that do not allow it; 22 states do not specifically authorize Chapter 9 filings and two others prohibit it. In the states that do authorize Chapter 9 filings, proving insolvency before a court, while seemingly straightforward, may actually be a more convoluted procedure that is difficult to demonstrate. This is because local governments benefit from a number of distinctive characteristics that set them apart from private-sector entities, such as an inability to be liquidated, the ability to collect taxes into the indefinite future, and, in many states, having

the power to pass local legislation. Additionally, municipalities cannot be forced into filing for bankruptcy, so any such undertaking would be purely voluntary. However, by volunteering to seek bankruptcy protection, and showing that it has failed to negotiate successfully with creditors, a municipality must malign itself to a certain extent by proving that it is incapable of performing the very functions for which it was organized.

Before the creation of Chapter 9, the only default remedy that creditors could pursue was a writ of mandamus to petition a court to compel the municipality to raise taxes. Under the severe strains of the Great Depression, a new approach was necessary to suit both creditors and debtors alike. Accordingly, the Bankruptcy Act was extended to municipalities through a 1934 amendment, which was later successfully challenged on constitutional grounds and subsequently revised in 1937. The revised act was upheld by the Supreme Court in 1938. Chapter 9 was amended in 1988 to exclude certain revenues from the automatic stay provisions of the Bankruptcy Code, which principally states that revenues received after a bankruptcy filing are no longer subject to a lien created under a security agreement prior to the filing.

Consequently, "special revenues" were defined as:²

- A.** Receipts derived from the ownership, operation, or disposition of projects or systems of the debtor that are primarily used or intended to be used to provide transportation, utility, or other services, including the proceeds of borrowings to finance the projects or systems;
- B.** Special excise taxes imposed on particular activities or transactions;
- C.** Incremental tax receipts from the benefited area in the case of tax-increment financing;
- D.** Other revenues or receipts derived from particular functions of the debtor, regardless of whether the debtor has other functions; or
- E.** Taxes specifically levied to finance one or more projects or systems, excluding receipts from general

property, sales, or income taxes (other than tax-increment financing) levied to finance the general purposes of the debtor.

While the last part of the definition of special revenues could apply to certain types of local GO debt, many notable local government bankruptcy filings involved debt secured with issuer general funds that did not include many of the strong structural characteristics discussed in the previous section of this paper: Orange County, CA (1994), Jefferson County, AL (2009), city of Stockton, CA (2012), and city of San Bernardino, CA (2012).

In the few Chapter 9 cases in which ULTGO debt was involved, one of two outcomes prevented the drawing of firm conclusions about the status of ULTGO debt in bankruptcy, or the status of LTGO debt with strong structural characteristics, for that matter. In one set of outcomes—Sierra Kings Health Care District, CA (2009) and city of Central Falls, RI (2011)—debt service was not disrupted by the bankruptcy (i.e., there was no default) due to the presence of a statutory lien, but, in both cases, the lien on unlimited ad valorem tax revenues was not contested by opposing creditors. In a second set of outcomes, city of Harrisburg, PA (2012), and city of Detroit, MI (2013), which involved ULTGO debt, one without strong structural features and one with, respectively, creditors agreed to a negotiated settlement that resulted in a recovery of less than face value for bondholders. Neither set of outcomes involved a judicial determination of the status of GO debt in bankruptcy.

Accordingly, without a bankruptcy court judge applying the Code to determine the status of GO debt vis-à-vis other creditors, it is difficult to draw any firm conclusions on how such debt would be treated in subsequent cases. Nevertheless, one important takeaway from Detroit's experience is worth noting: Detroit's ULTGO debt has very strong structural characteristics—indeed, it receives the highest score possible in our assessment (see Michigan on page 10)—and the debt holders received a much higher recovery value than other bondholders that were not otherwise clearly secured with special revenues, though the recovery was still less than face value.

With regard to other lessons learned from Detroit's Chapter 9 case, we quote from a publication by the law firm Jones Day:

General obligation ("GO") bonds, usually regarded as the safest type of municipal bonds, are not immune from impairment in a chapter 9 bankruptcy. While GO bonds often are said to be "secured" or backed by a "pledge" of the taxing power of the municipality,

these bonds are not necessarily actually secured by collateral. Instead, in municipal finance, these terms may mean only that the issuer has promised to pay the bonds out of a specified revenue stream and that it will raise taxes to do so if necessary.³

Where a municipality cannot provide essential services, the municipality's need to do so may well come before the interests of GO bondholders and other creditors. If

Recent Appeals Court Ruling on Special Revenues

A decision by the U.S. Court of Appeals for the First Circuit in a case brought by bond insurers regarding Puerto Rico Highways and Transportation Authority revenue bonds affirmed a 2018 district court opinion regarding special revenues as defined in Chapter 9 of the U.S.C. The district court dismissed claims by the creditors regarding payment of the bonds. The insurers appealed the First Circuit decision to the U.S. Supreme Court, which on January 13, 2020, denied a request to review the ruling that municipal governments are permitted, but not required, to pay debt service on special revenue bonds in bankruptcy.

The Supreme Court's silence leaves in place the First Circuit ruling granting Chapter 9 authorization to a municipality to continue paying debt secured with special revenues during bankruptcy, but it does not require the municipality to do so. The long-held understanding in the municipal market had been that payment on special revenue debt would continue, indeed was required to continue, during the bankruptcy proceedings. By deeming such payments optional, the ruling has created uncertainty about the status of special revenue obligations during bankruptcy. In its written opinion the circuit court stated that the language of the code is unambiguous, and therefore the legislative history of Chapter 9 is unnecessary to interpret it, despite a clear intent in prior legislation to limit the scope of the automatic stay provisions of the Code for special revenues pledged by municipalities.

The decision is significant for future municipal bankruptcy cases and may affect the value of some municipal securities thought to be secured with special revenues. Certain credit ratings that have been negatively affected by the decision include bonds secured by utility, transportation, and tax revenues that were rated above the obligor's GO (or equivalent) rating. Although technically the decision is only binding on districts within the First Circuit (Maine, Massachusetts, New Hampshire, Puerto Rico, and Rhode Island), the decision will be influential in municipal bankruptcy cases nationwide given the overall lack of municipal bankruptcy case law.

Federal Judge Rules Bondholders Had No Lien on Revenues

In another potential blow to special revenue bondholder security, on 22 March 2023, the federal district judge in the Puerto Rico Electric Power Authority bankruptcy ruled bondholders had no lien on the authority's revenues. The judge rejected bondholders' argument that they had a secured claim on the authority's revenue stream, limiting their lien to money held in certain accounts of the authority. The decision appears to stem from the opinion that, despite language in the trust agreement whereby the authority has pledged the revenues of the system, the word "pledge" is an unsecured promise and did not create a lien, which would require use of the words "lien or charge." If this ruling stands it would relegate authority bondholders to unsecured creditor status.

Purchasers of bonds issued by governmental entities that lack taxing power commonly require security. Because governmental entities typically lack authority to pledge tangible assets of utility systems, transportation networks, or other public assets as bondholder security, they pledge the revenue stream generated by the financed assets as security. By borrowing against a relatively perpetual stream of future revenues, rather than against only what is held in certain accounts receivable, governmental entities can raise the funds necessary to build, maintain, and improve long-lived public infrastructure. In fact, provisions in the Bankruptcy Code encourage such lending by defining special revenues and allowing for the associated lien to continue to apply to revenues generated after a bankruptcy filing.

The district judge's ruling may not be the final word regarding ultimate bondholder recovery in this case, and the creditors could still appeal to the U.S. Court of Appeals for the First Circuit. However, market participants are left wondering where they stand with respect to municipal revenue bond security if, in satisfying post-bankruptcy claims, creditors cannot look to the value of tangible assets or to the value of a special revenue stream. If the ruling stands, and market participants reason that it was purely derived from a narrow reading of the trust indenture, and not broadly applicable to municipal revenue bonds in general, the impact on such bonds may be limited.

there are real constraints on raising taxes—for example, if tax delinquency rates are already high or the municipality will suffer further decline by raising taxes—bankruptcy courts will not require the municipality to increase taxes. In other words, all creditors, including GO bondholders, are exposed to risk if the municipality cannot provide adequate services to its residents and its tax base is stressed.

State-law limits on a municipality’s ability to issue and collateralize debt are important, and the legality of debt instruments designed to circumvent such limits is highly questionable. In Detroit, some lenders had accepted obligations that were structured to avoid the city’s debt limits. Ordinarily, legal opinions protect investors from this kind of risk, but in appropriate cases, the opinions can successfully be challenged. As a result, holders of some obligations face the real possibility that their claims might not be enforceable at all.

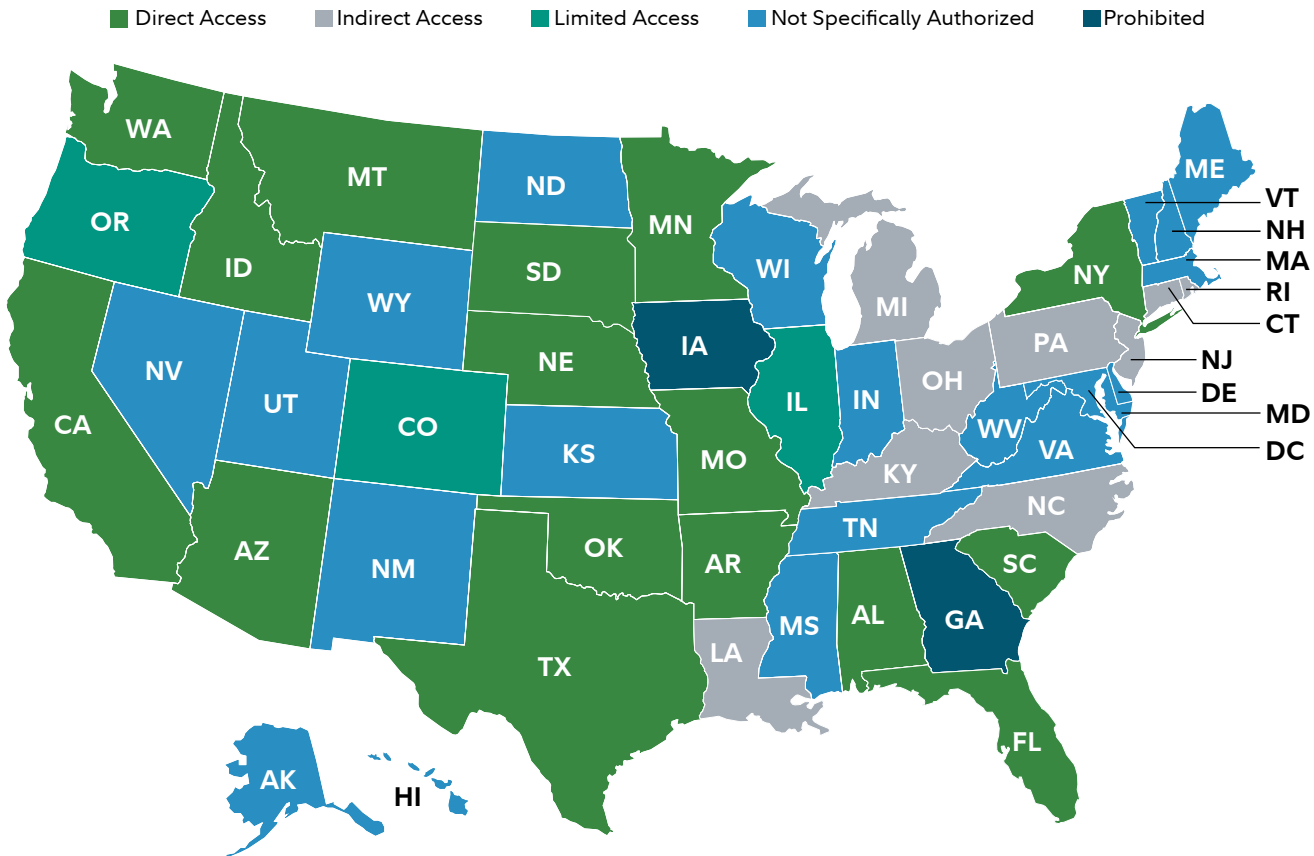
One last point to consider is that because municipalities cannot be forced to file bankruptcy, and because bankruptcy is not specifically allowed in many states, default and bankruptcy are two separate conditions that may not necessarily coexist. For example, the Sierra Kings and Central Falls bankruptcy cases did not involve defaults on GO debt, while the defaults by New York City and Cleveland during the 1970s did not involve bankruptcy filings.

State oversight

This section is not intended to encompass all state programs, or even to cite all prior instances of intervention within the states mentioned. Details from prior interventions, some of which have been in place for more than a decade, are beyond the scope of this paper.

LOCAL GOVERNMENTS' ABILITY TO FILE FOR CHAPTER 9 BANKRUPTCY

The map below illustrates the five categories that classify local governments' ability to file bankruptcy under Chapter 9.



Source: National Association of Bond Lawyers, Fidelity Capital Markets, March 2023.

Rather, the intent is to demonstrate the clear preference by certain states for direct involvement in managing local government fiscal distress as an alternative to bankruptcy and default.

This is perhaps nowhere more apparent than in the numbers themselves: interventions in the fiscal affairs of distressed local governments have been far more common than bankruptcies and defaults. States have a history of intervening in the financial affairs of distressed local governments; such intervention has generally been supportive of debt repayment, and in many cases has prevented default or the need to file bankruptcy (although there have been past situations involving a state's intervening after a default had already occurred). In terms of financial assistance, state interventions may take the form of direct loans, state guarantees, or state-aid withholding mechanisms; the authorization of new funding sources, such as a sales tax; or approval of deficit bond issuance.

Rarely have interventions come without strings attached, however. State involvement in the fiscal affairs of distressed local governments has included varying degrees of supervision—from softer ongoing monitoring to more thorough forms of oversight, to harder mechanisms, such as control boards. While there is no uniform approach or program structure across states, the intent behind all state oversight regimes is similar: to ensure that local governments continue to provide essential services and maintain adequate financial operations. To this end, certain states have sophisticated financial reporting systems for local governments, accompanied by statutory tools for intervening if necessary. Such an approach allows for ongoing monitoring, early fiscal distress detection, and, if necessary, state intervention. Other states may not have monitoring tools that require local governments to report detailed financial information regularly, but do have procedural steps necessary to intervene codified in statute. Such a process would be triggered once a local government is identified as being in fiscal distress, usually upon the occurrence of one of a set of statutory conditions. Some states that do not have formal programs in place have preferred to enact special legislation on a case-by-case basis.

States that have strong formal monitoring of local governments include California and Texas for school districts only, and Massachusetts, Michigan, and North Carolina for all local governments. California school districts that have benefited from the state's program include Vallejo Unified School District (USD), Oakland USD, West Contra Costa USD, and Inglewood USD. In Texas, Lancaster Independent School District (ISD), Premont ISD, and North Forest ISD have received assistance under the state's program. Massachusetts has intervened in the operations of the cities of Springfield and Chelsea. Michigan has a fairly robust set of laws to deal with local government fiscal distress; the state has a long history of intervention, both in school districts, such as Clintondale, Detroit, Muskegon Heights, Highland Park, and Pontiac, and in cities, such as Detroit, Pontiac, Flint, Benton Harbor, Ecorse, River Rouge, and Inkster. While North Carolina does not present any notable postwar-era examples, its formal oversight program was established in 1931 in response to the great fiscal distress experienced by local governments during that period.

Rhode Island and Pennsylvania also have formal monitoring programs that apply to all local governments, although the level of oversight is more moderate. This is perhaps evidenced by the bankruptcy filings of Central Falls, Rhode Island, and Harrisburg, Pennsylvania (the bankruptcy court subsequently rejected Harrisburg's filing). In the past, Rhode Island has stepped in to assist the cities of Providence and West Warwick, and oversaw a takeover of the Central Falls School District. Pennsylvania has had extensive experience with local government intervention in cities that include Scranton, Reading, Harrisburg, Pittsburgh, and Philadelphia. Illinois, although it does not have formal ongoing supervisory practices, has exercised state powers of control over fiscally distressed local units on several occasions, including those at the Chicago Board of Education and in East St. Louis. New York has a limited monitoring program with no formal procedures, but, like Pennsylvania, has had extensive experience with local government intervention. Past interventions have been conducted on an ad hoc basis, including those conducted in the cities of New York, Buffalo, Troy, Yonkers, and Newburgh; the counties of

Erie and Nassau; and in the Roosevelt Union Free School District. Connecticut also has no formal program, but has taken a similar approach to that of New York, passing special legislation to support the cities of Hartford, Waterbury, and Bridgeport.

One local government type that receives special attention in many states is school districts. The use of state guarantees, state-aid intercepts, and other similar programs to support the credit of school district GO bonds is common in U.S. public finance. The programs are designed to make funds available for timely debt service payments

prior to a default. For example, the states of Texas, Utah, Idaho, Oregon, Washington, and Michigan guarantee the GO bonds of qualifying school districts. South Carolina, Minnesota, and West Virginia ensure timely debt-service payments on school district debt through legislative appropriation, if necessary. At least 14 states rely on intercept programs that are designed to divert, or intercept, state aid due to a school district in the event of a debt-service payment shortfall. (For more about state support for school district debt, see our paper, [State School District Credit Enhancement Programs, March 2023.](#))

Conclusion

Local governments have shown a very low propensity to default on their debts, and defaults involving ULTGO bonds have been rarer still. Even under extreme duress, properly structured GO debt may stand to receive a higher recovery value in a restructuring than the issuer's other unsecured debt. The principal distinction that investors should consider regarding security structure is whether a GO bond is backed by property tax revenues that are, preferably, segregated from the issuer's general funds. While this distinction may be straightforward for some local government bonds, for others it may require a more thorough review of disclosure language. However, as the Detroit case demonstrates, even the strongest forms of ULTGO debt may be treated as "unsecured" and subject to restructuring in a bankruptcy.

While security structure is important, ultimately the overall credit quality of the issuer should concern investors when considering general obligation bonds.

Finally, an established state oversight or credit enhancement program, or a history of state support for fiscally distressed local governments, provides investors with another way to compare the debts of local government issuers from different states.

Appendix

LOCAL GENERAL OBLIGATION DEBT SECURITY									ULTGO SCORE			LTGO SCORE		
State	Type of government issuing debt*	Unlimited property tax pledge (ULTGO)	Limited property tax pledge (LTGO)	"Full faith and credit" pledge	Separate dedicated debt-service levy	Pledged revenues held separately	Statutory lien	Voter approval required to issue	Cities	Counties	School districts	Cities	Counties	School districts
Alabama	Cities, counties	N	Y (for bonds or warrants)	Y	N	N	N	Y (for bonds only)	N/A	N/A	N/A	1.5	1.5	N/A
Alaska	Cities, boroughs	Y	N	Y	N	N	N	N	1.0	1.0	N/A	N/A	N/A	N/A
Arizona	Cities, counties, school districts, certain special districts	Y	N	N	Y	Y	Y	N	3.0	3.0	3.0	N/A	N/A	N/A
Arkansas	Cities, counties, school districts	N	Y	N	Y	Y (case by case for school districts)	N	Y	N/A	N/A	N/A	2.0	3.0	2.5
California	Cities, counties, school districts, certain special districts	Y	N	N	Y	Y (case by case for cities)	Y	Y	3.5	4.0	4.0	N/A	N/A	N/A
Colorado	Cities, counties, school districts, certain special districts	Y	Y (metropolitan districts only)	Y	Y	Y	Y	Y	5.0	5.0	5.0	N/A	N/A	N/A
Connecticut	Cities, certain special districts	Y	N	Y	N	N	N	Y (case by case)	1.5	N/A	N/A	N/A	N/A	N/A
Delaware	Cities, counties, school districts	Y	N	Y	N	N	N	Y (case by case for cities and counties)	1.5	1.5	2.0	N/A	N/A	N/A
Florida	Cities, counties, school districts	Y	Y	Y	Y	N	N	Y	3.0	3.0	3.0	3.0	3.0	3.0
Georgia	Cities, counties, school districts, certain public authorities (through inter-governmental contract)	Y	Y (public authorities only)	Y	Y (except for public authorities)	Y (except for public authorities)	N	Y (except for public authorities)	2.5	2.5	2.5	1.0	2.5	2.0
Hawaii	Counties	Y	N	Y	N	N	N	N	N/A	1.0	N/A	N/A	N/A	N/A
Idaho	Cities, counties, school districts, certain special districts	Y	Y	Y	Y (for ULTGO only)	N	Y	Y (for ULTGO only)	4.0	4.0	4.0	2.0	2.0	2.0
Illinois	Cities, counties, school districts (excluding the City of Chicago, Chicago Public Schools, and Cook County, which are governed by separate statutes)	Y	Y	Y	Y (for ULTGO only)	Y	N	Y (case by case for city and county ULTGO only)	3.5	3.5	4.0	2.0	2.0	3.0
Indiana	Cities, counties, school districts	Y	Y	N	Y	N	N	Y (for ULTGO only)	2.0	2.0	2.0	1.0	1.0	1.0
Iowa	Cities, counties, school districts	Y	Y (cities and counties only)	N (Y for LTGO)	Y (for city and county ULTGO only; case by case for school district ULTGO)	Y (for ULTGO only)	N	Y (for school districts only; case by case for cities and counties)	2.5	2.5	2.5	1.5	1.5	N/A

*"Cities" includes smaller municipalities such as towns, villages, and hamlets. • ULTGO = unlimited tax general obligation; LTGO = limited tax general obligation. • Sources: Moody's Investors Service, Fidelity Capital Markets, March 2023.

Appendix (continued)

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Kansas	Cities, counties, school districts	Y	N	Y	Y	Y	Y	Y (for school districts only; case by case for cities and counties)	4.5	4.5	5.0	N/A	N/A	N/A
Kentucky	Cities, counties, school districts, certain special districts	Y	N	Y	N	Y	N	Y (for school districts only; case by case for cities, counties, and certain special districts)	2.5	2.5	3.0	N/A	N/A	N/A
Louisiana	Cities, counties, school districts, certain special districts	Y	Y	Y (for ULTGO only)	Y (for ULTGO only)	Y	Y (for ULTGO only)	5.0	5.0	5.0	1.0	1.0	1.0	
Maine	Cities, counties, school districts	Y (for school districts only)	Y (for cities and counties only)	Y	N	N	Y (case by case for cities)	N/A	N/A	2.0	1.5	2.0	N/A	
Maryland	Cities, counties, certain special districts	Y	Y	N	N	N	N	Y (case by case)	0.5	0.5	N/A	0.5	0.5	N/A
Massachusetts	Cities, school districts	Y	Y	Y	N	N	N	N	1.0	N/A	1.0	1.0	N/A	1.0
Michigan	Cities, counties, school districts, certain special districts	Y	Y	Y	Y (for ULTGO only)	Y (for ULTGO only)	Y	Y (for ULTGO only)	5.0	5.0	5.0	2.0	2.0	2.0
Minnesota	Cities, counties, school districts	Y	N	Y	Y	N	Y	Y (case by case)	3.5	3.5	3.5	N/A	N/A	N/A
Mississippi	Cities, counties, school districts	Y	Y (for school districts only)	Y (for ULTGO only)	Y	N	N	Y (for school districts only)	2.0	2.0	3.0	N/A	N/A	2.0
Missouri	Cities, counties, school districts	Y	N	Y	Y	Y	N	Y	4.0	4.0	4.0	N/A	N/A	N/A
Montana	Cities, counties, school districts	Y	Y (for cities and counties only)	Y	Y (for ULTGO only)	Y (for ULTGO only)	N	Y	4.0	4.0	4.0	2.0	2.0	N/A
Nebraska	Cities, counties, school districts, certain special districts	Y	Y	Y (case by case)	Y (for ULTGO only)	N	N	Y (for ULTGO only)	2.5	2.5	2.5	0.5	0.5	0.5
Nevada	Cities, counties, school districts, certain special districts	N	Y	Y	Y (case by case)	Y (case by case)	N	Y (case by case)	N/A	N/A	N/A	2.5	2.5	2.5
New Hampshire	Cities, counties, school districts, certain special districts	Y	N	Y	N	N	N	Y (case by case)	1.5	1.5	1.5	N/A	N/A	N/A
New Jersey	Cities, counties, school districts	Y	N	Y	N	N	N	N	1.0	1.0	1.0	N/A	N/A	N/A

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Appendix (continued)

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New Mexico	Cities, counties, school districts, certain special districts	Y	Y (for community college districts only)	Y	Y	N	N	Y (for cities, counties, and school districts only)	3.0	3.0	3.0	N/A	N/A	N/A
New York	Cities, counties, school districts, certain special districts (excluding the City of New York, which is governed by separate statutes)	Y	N	Y	N	N	N	Y (for school districts only)	1.0	1.0	2.0	N/A	N/A	N/A
North Carolina	Cities, counties	Y	N	Y	N	N	N	Y	2.0	2.0	N/A	N/A	N/A	N/A
North Dakota	Cities, counties, school districts, certain special districts	Y	Y	Y (for ULTGO only)	Y	Y	N	Y (case by case)	3.5	3.5	3.5	2.5	2.5	2.5
Ohio	Cities, counties, school districts	Y	Y	Y	Y (for ULTGO only; case by case for LTGO)	N	N	Y (for ULTGO only)	3.0	3.0	3.0	1.5	1.5	1.5
Oklahoma	Cities, counties, school districts	Y	Y (for cities and counties only)	Y	Y	Y	N	Y	4.0	4.0	4.0	4.0	4.0	N/A
Oregon	Cities, counties, school districts	Y	Y	Y	Y (for ULTGO only)	Y (for ULTGO only)	Y (for ULTGO only)	Y (for ULTGO only)	5.0	5.0	5.0	1.0	1.0	1.0
Pennsylvania	Cities, counties, school districts	Y	Y (for school districts only)	Y	N	N	N	Y (for school districts ULTGO only)	1.0	1.0	2.0	N/A	N/A	1.0
Rhode Island	Cities	Y	N	Y	N	N	Y	N	2.0	N/A	N/A	N/A	N/A	N/A
South Carolina	Cities, counties, school districts	Y	N	Y	Y	Y	N	Y (case by case)	3.5	3.5	3.5	N/A	N/A	N/A
South Dakota	Cities, counties, school districts	Y	Y (for counties and school districts only)	N	Y	N	Y	3.0	3.0	3.0	N/A	3.0	3.0	
Tennessee	Cities, counties	Y	N	Y	N	Y	N	2.0	2.0	N/A	N/A	N/A	N/A	
Texas	Cities, counties, school districts, certain special districts	Y	Y	N	Y	Y	Y	Y (for ULTGO only; case by case for LTGO)	4.0	4.0	4.0	3.5	3.5	3.5
Utah	Cities, counties, school districts, certain special districts	Y	Y (for water conservation districts only)	Y	Y	Y	Y	Y	5.0	5.0	5.0	N/A	N/A	N/A
Vermont	Cities, counties, school districts	Y	N	Y	N	N	N	N	1.0	1.0	1.0	N/A	N/A	N/A
Virginia	Cities, counties	Y	N	Y	N	N	N	Y (case by case for counties); N (cities)	1.0	1.5	N/A	N/A	N/A	N/A
Washington	Cities, counties, school districts, certain special districts	Y	Y (for cities, counties, and certain special districts only)	Y (case by case)	Y (for ULTGO only)	Y (for ULTGO only)	N	Y (for ULTGO only)	3.5	3.5	3.5	0.5	0.5	N/A
West Virginia	Cities, counties, school districts	Y	N	N	Y	Y	N	Y	3.0	3.0	3.0	N/A	N/A	N/A
Wisconsin	Cities, counties, school districts	Y	N	Y	Y	Y	N	Y (for school districts only)	3.0	3.0	4.0	N/A	N/A	N/A
Wyoming	Cities, counties, school districts	Y	N	Y (for counties and school districts only)	Y	N	N	Y (for counties and school districts only)	1.0	3.0	3.0	N/A	N/A	N/A

*"Cities" includes smaller municipalities such as towns, villages, and hamlets. • ULTGO = unlimited tax general obligation; LTGO = limited tax general obligation. • Sources: Moody's Investors Service, Fidelity Capital Markets, March 2023.

Appendix (continued)

LOCAL GENERAL OBLIGATION DEBT SECURITY									ULTGO SCORE			LTGO SCORE			
State	Type of government issuing debt*	Unlimited property tax pledge (ULTGO)	Limited property tax pledge (LTGO)	"Full faith and credit" pledge	Separate dedicated debt-service levy	Pledged revenues held separately	Statutory lien	Voter approval required to issue	Cities	Counties	School districts	Cities	Counties	School districts	
Wisconsin	Cities, counties, school districts	Y	N	Y	Y	Y	N	Y (for school districts only)	3.0	3.0	4.0	N/A	N/A	N/A	
Wyoming	Cities, counties, school districts	Y	N	Y (for counties and school districts only)	Y	N	N	Y (for counties and school districts only)	1.0	3.0	3.0	N/A	N/A	N/A	
									Average	2.8	2.9	3.2	1.7	2.0	1.9
									Min	0.5	0.5	1.0	0.5	0.5	0.5
									Max	5.0	5.0	5.0	4.0	4.0	3.5

*"Cities" includes smaller municipalities such as towns, villages, and hamlets. • ULTGO = unlimited tax general obligation; LTGO = limited tax general obligation. • Sources: Moody's Investors Service, Fidelity Capital Markets, March 2023.

Notes:

The Appendix provides a table of the key structural characteristics that apply to the local GO bonds of cities, counties, and school districts in different states. We separate the ULTGO and LTGO security for these three main types of local government issuers and score their strength on a scale of 0-5, where a higher number equals a stronger security structure. Under the scoring methodology each of the five factors listed below receives one point if it is a feature of the GO security structure, designated in the table with a "Y". If the factor is not a feature of the GO security structure it is designated in the table with an "N". If the factor is qualified, such as being applicable on a "case-by-case" basis, it receives one half of one point; qualifications (and government type applicability if not uniform across governments types) are in parenthesis next to the factor designation "Y" or "N," as the case may be. The scores for the ULTGO and LTGO security structures are then summed for each government type under each state.

Scoring Factors:

- 1 Full faith and credit pledge
- 2 Separate dedicated debt service levy
- 3 Pledged revenues held separately
- 4 Statutory lien
- 5 Voter approval required to Issue

Important Information

1 Source: 11 U.S.C. Section 109(c).

2 Source: 11 U.S.C. Section 902.

3 Source: Jones Day, "Nine Lessons from Detroit's Chapter 9 Case," November 2014.

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Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss.

Diversification does not ensure a profit or guarantee against a loss. Interest income earned from tax-exempt municipal securities generally is exempt from federal income tax, and may also be exempt from state and local income taxes if you are a resident in the state of issuance. A portion of the income you receive may be subject to federal and state income taxes, including the federal alternative minimum tax. In addition, you may be subject to tax on amounts recognized in connection with the sale of municipal bonds, including capital gains and "market discount" taxed at ordinary income rates. "Market discount" arises when a bond is purchased on the secondary market for a price that is less than its stated redemption price by more than a statutory amount. Before making any investment, you should review the official statement for the relevant offering for additional tax and other considerations.

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900 Salem Street, Smithfield, RI 02917

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