Issues in Municipal Default Analysis

1. Introduction and Summary Conclusion

There is a widely-held view that municipal obligations default at a much lower rate than corporate or structured securities. The statement itself is generally accurate, and as with all generally accurate statements, potentially misleading. The problem is that the statement, or more precisely the underlying comparison, is uncritical, inviting analytical conclusions and assumptions relative to the spectrum of different asset (i.e., municipal, corporate and structured) classes, instead of conclusions and assumptions directly linked to the very different dynamics that drive default rates for the different asset classes.

Municipal finance encompasses more than 22 different activity sectors, each of which provides investors with different claims, rights, and remedies; and ultimately options and incentives upon default. The default rates and severity of default (i.e., the impact of the default on the likelihood of recovering some portion of the loan) for each of these sectors differ. If we assign all municipal finance activity sectors to one of three groups based on common default characteristics, we find that only those municipal finance sectors that are backed by tax or tax like authority default at a lower rate than corporate or structured securities. A second group of municipal finance sectors, which provides for corporate or structured like repayment mechanisms but is associated with essential government activity, default at a rate only slightly lower than corporate securities. The third group, which provides for corporate or structured like repayment mechanisms but is associated more with traditionally private than government activity, defaults at rates almost identical to that of corporate securities.

The dynamics that drive municipal default rates are sufficiently unique to require special analysis and expertise. To the extent that certain municipal obligations default at a lower rate than corporate or structured obligations, it reflects that up to this point, the political culture posits that municipal issuers engaged in certain financing activity are perpetual in nature and will not be permitted to go out of business. Lower default rates also reflect that municipalities provide unique, statutorily required services associated with social stability and thus intrinsically tied to government stability. These factors create strong incentives for the "next layer" of government to intervene early to prevent certain defaults. Also, municipalities issue a significant number of different types of obligations, not all of which will affect the above political sensitivities in the same way. Each type of finance activity is backed by a different claim on municipal or project assets, if it is backed at all, as well as different investor rights and remedies on default. In addition and significantly, the legal process applicable to municipalities severely limits and constrains the type of investor remedies typical in the corporate context. These last two considerations provide the context for a strong investor incentive to cooperate with politicians and legislators to resolve troubled municipality situations in an orderly manner. It is in this context that we should consider the extent to which municipal obligations default at a lower rate than corporate securities.

2. Discussion

a. Interpreting Published Default Rates – To properly interpret relative municipal default rates correctly, we must know the population from which the statistics are derived and the definition of default that is applied in those statistics.

Standard and Poor's (S&P) report on municipal default statistics focuses on the period between 1986 and 2008. S&P defines a default as the first occurrence of a monetary payment default on the relevant obligation.[1] The objective of the S&P report is to assess the relative accuracy of S&P ratings by tracking the rate at which S&P rated municipal obligations transition to lower ratings. The S&P report shows that there were only 34 issuer defaults out of 10,268 borrowing entities. However, this statistic is only relevant for the universe of S&P rated issuers. "When the entirety of public finance issuers and issues is evaluated, as opposed to simply the (S&P) rated universe, however, more defaults are seen … more than 1,100 issue defaults during the same period."[2]

Moody's Investors Service (Moody's) report on municipal default rates primarily seeks to explain Moody's approach to mapping the municipal rating scale to the global rating scale applicable to other than municipal obligations. Moody's says that a corporate credit rating measures expected loss, defined as the probability of default times loss given default. In contrast, the long term municipal ratings measure "the intrinsic ability and willingness of an entity to pay its debt service. In other words, municipal rating measures the distance to distress or the likelihood of an entity reaching such a weakened financial condition that extraordinary support (from another level of government or voter enacted additions to government power) is needed to avert default."[3] Moody's defines a default to include a missed or delayed disbursement of interest and/or principal, bankruptcy, reorganization, receiverships and legal blocks to payment and distressed exchanges (for example where the obligor offers debt holders a new security amounting to a diminished financial obligation).[4] The report is based on municipals rated by Moody's between 1970 and 2006. The default rates and loss severities in the report are based on a combination of Moody's analysis of historical default rates and near-defaults of municipal bonds which are then idealized[5] by rating category, and a set of average loss severities upon default for

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[1] Standard and Poor's Ratings Direct, U.S. Municipal Rating Transitions and Defaults, 1986-2008, March 20, 2008, page 17 (hereafter S&P Default Study).
[2] S&P Default Study, page 6.
[3] Moody's Investors Service, ratings Methodology, The U.S. Municipal Bond Rating Scale: Mapping to the Global Rating Scale and Assigning Global Scale Ratings to Municipal Obligations, March 2007, (hereafter Moody's Default Study) page 2.
[4] Moody's Default Study, page 3.
[5] Idealized default rates are probability of default rates used to assign a quantitative value to the default risk of municipal ratings. The probability rates are based on historical default rates as well as Moody's prospective views on default rates of municipal sector. These rates are an attempt to adjust for defaults prior to 1970 when legal and systematic bondholder protection common today did not exist, that economic conditions in the future may be less favorable than in the past and the existence of municipal finance sectors that did not previously exist. Moody's Default Study, page 9.

each municipal sector. Moody's says it has not included data on defaults of non-Moody's rated debt.[6]

Fitch indicates its study is based on all municipal bond defaults, not just those rated by it or other rating agencies. However, the default studies on which the statistics are based appear to cover the period from 1987 to 2002.[7] Fitch says its municipal ratings measure credit quality relative to other U.S. public finance debt securities.[8]

b. Default Rates by Municipal Finance Sectors - Municipal obligations differ significantly as to the activity they finance[9] and the relative protection given to the investor. The type of activity financed is referred to as a sector. Strong investor protection is provided by covenants to exercise the taxing authority of the state or locality, the right to receive project cash flow when this is at least demonstrably equal to debt service or the right to collateral, including project assets when the value of these are at least equal to the amount due the investor. Not all municipal obligations provide the investor an expectation of this level of protection. However, if we examine the incentives created by the political and legal context of municipal finance, we can conclude that differences in municipal default rates and the severity of those defaults are correlated to the importance of the sector to the municipality's primary function as reflected by the sector activity, and the degree of investor protection afforded the investor in that sector. S&P and Moody's report great detail on sector specific default rates in the cited studies, subject to the report parameters already noted. A review of those statistics is, however, beyond the scope of this paper.

Fitch's report is helpful in arriving at a summary of the default characteristics of all municipal finance sectors. Fitch's report assigns each sector into one of 3 groups based on their default risk characteristics. Fitch's 3-tier grouping scheme applies to activity in the period from 1987 to 2002. Fitch found that the lowest default risk grouping consisted of "general obligation, tax backed, and most appropriation backed debt of state and local governments, as well as general obligation and revenue bonds issued by long standing, essential purpose enterprises that are either natural monopolies or have strong protections against competition." Examples of financed activities include single-family housing, public power distribution, utilities, and water and sewer revenue bonds. Fitch determined that the 5 to 15 year cumulative default rate for the sectors in this group was 0.24%

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[6] Moody's Default Study, pages 1and 4 respectively. Somewhat paradoxically, the report continues: "…However, we have studied non-rated defaults and near defaults to learn more abut the performance of credits under stress including both default frequency and loss severity. We believe that our results are not skewed by the exclusion of unrated debt, most of which would be rated below investment grade, **where our default rates increase sharply**…(emphasis added)"

[7] Fitch Ratings, Public Finance Special Report, Default Risk and Recovery Rates on U.S. Municipal Bonds, January 9, 2007, (Fitch Default Study), at page 1.

[8] See, http://www.fitchratings.com/corporate/fitchResources.cfm?detail=1&rd_file=uspf

[9] Municipal credit types include: general obligation, lease/appropriation/moral obligation, special tax (sales, gas, etc.) special district, water and sewer revenue, public power, airports, ports, toll roads and bridges, parking, various types of bond pools, transit, public and private higher education, independent schools, hospitals, continuing care and physicians practices. See, S&P Default Study.

compared to the 10 year cumulative default rate of 0.43% for AAA rated global corporate bonds.

The second default risk grouping consisted of entities that provide essential services but are not fully insulated from competition or fluctuations in demand. Examples are hospitals, private higher education institutions, multifamily housing projects, airports, seaports and toll roads with established traffic patterns. The 5 to 15 year cumulative default rate for the sectors in this group averaged .70% against a 10 year default rate of .76% for AA rated corporate bonds.

The third default risk grouping consists of entities that must compete against private sector entities or that consist of projects with volatile revenue streams. Examples of financed activities in this group are industrial development revenue bonds, local multifamily housing, nursing homes, toll roads, transportation facilities lacking an established traffic pattern, tobacco securitizations, and tribal gaming bonds. The 5 to 15 year cumulative default rate for the sectors in this group averaged 3.65% against a 10 year default rate of 3.97% for BBB+ rated corporate securities.[10]

This assessment suggests that municipal finance projects closely resembling similar private activity and providing for repayment solely from underlying usage fees tended to default at rates very similar to corporate projects.[11] Only municipal project sector obligations backed by specific taxing or similar authority and certain kinds of protected revenue projects have significantly lower rates of default than corporate or structured securities.

c. Incentives for Intervention Prior to Default and Cooperation Thereafter

A. Municipal Incentives – The cited credit rating agency reports assume that the performance of rated municipal obligations reflects that the functions of municipalities is so important that it will be preserved at almost any costs. The rationale underpinning this view is rather compelling. Government services are required by statute, so not only is a cessation of services not an option, but disruption in the provision of services must be minimized. Since government services are initiated or increased only in response to demonstrated and existing need, governments lack the flexibility to eliminate or curtail the vast majority of services in response to declines in revenue. The failure of basic municipal services such as sanitation, police and fire protection would result in an unacceptable level of social dislocation to the municipality and surrounding communities. Municipalities require financing; therefore maintaining the confidence of the market is an essential political-legislative objective. State statutes must identify whether a

[10] See, Fitch Default Study.

[11] Other observations support the conclusion that municipal defaults increase as the source of payment gets further away from taxing authority. See, James E. Spiotto, Government Bankruptcy: The Myth and Reality of Financially Troubled Municipalities: A Ripple or a Tidal Wave, Practising Law Institute, Corporate Law and Practice Handbook Series, January, 1996, (hereafter, Spiotto, Ripple or Tidal Wave), citing statistics obtained from the Bond Market Association for different time periods. "Approximately 75% of all municipal bond defaults have occurred in bonds issued to finance revenue producing enterprises (i.e., highways, bridges, utilities, swimming pools, harbors, etc.)…."

municipality may apply for federal bankruptcy protection, therefore, this is not an option for many municipalities. If bankruptcy is an option, it may not be a viable one since, by itself, bankruptcy will not solve the deficiencies in revenue that lead to defaults.

To the extent these considerations operate in a given situation, we can conclude that they provide a strong incentive to political leaders at the next level of government to intervene to correct financial imbalances prior to actual default. The only issue would be the timing and specific trigger for the expression of the political will, which we assume would be influenced by public opinion on the issues that caused or contributed to near or actual municipal default. Default or financial instability caused by a fundamental imbalance in cost structures relative to tax rates would require different responses and or engender different levels of public support compared to near or actual defaults caused by mismanagement, corruption, or natural disasters. [12]

All of this said, we should recall that Fitch's third group (and to some limited extent their second group) consists of activities not uniquely municipal in nature. These also exhibit higher levels of default which correlate to the existence of private competition. In these types of activities the investor has recourse only to the fee revenue, if any, generated by the project. We can safely assume that the considerations discussed above would not be present for these municipal finance activities. Such projects may not even trigger officials' concern with preserving credit ratings and access to markets. Moody's makes the same point in its discussion of loss given default, which is discussed below in the context of investor incentives to participate in resolution of troubled municipalities. This is equally applicable here as one of the factors political leaders will undoubtedly consider when deciding whether to intervene.

B. Bondholder Incentives

State Law Remedies

The holder of a general obligation bond has no rights in specific collateral and can recover only if it can compel or convince the municipality to raise taxes and to use those taxes to pay debt service on the obligation. Moody's believes the lower default rates associated with general obligations backed by taxing authority reflects the high legal enforceability of the general obligation's tax pledge and the other considerations discussed above. Moody's believes that if such obligations default, late payments are possible but payments will be made eventually.

A closer analysis suggests the reasoning is sound but subject to oversimplification and misapplication. Case law supports the idea that bondholders can sue for a court order directing the appropriate municipal official to take specified action, such as to pay a money judgment, or to fulfill a statutory duty to raises taxes to pay debt (i.e., mandamus), or to take some similar action under theories of specific performance or equitable relief. But not all such possible investor options are viable in given factual situations or in general. A money judgment is not helpful because courts, on public policy grounds,

[12] Spiotto, Ripple or a Tidal Wave and, S&P Default Study.

would not allow any investor to foreclose on or seize and sell municipal property to pay debt, as these actions could disrupt government operations. Also, courts are unlikely to allow the seizure of the private property of municipal residents to pay the municipality's debt; however connected those assets are to the financing. Bondholders may seek an order in mandamus to require the municipality to increase its taxes to pay debt service, but this could be difficult to enforce because it is typically directed to a specific municipal official whose duty it is to perform a given function, but who may resign as part of the financial crisis. Also, a court would not issue mandamus if raising taxes would cause the municipality to exceed constitutional or statutory debt limits.[13] The bondholder may accelerate the payment of principal and interest, but this remedy is only useful to obtain a deficiency judgment. In addition, trust indentures impose requirements for exercise of the most common investor remedies. Note that these limitations apply to municipal obligations with broad security pledges.

By definition, the limitations for actions relative to municipal obligations backed by narrower security pledges (such as debt secured by lease obligations or gas, sales, or cigarette taxes, or those secured by special assessments) may be less rosy. Although the issuers of these obligations are municipal entities, they have limited their exposure to a specific and potentially limited pool of revenue or assets. The investor may have rights in collateral which could be liquidated but its recovery would be limited to the value of the collateral. Investors may feel that a suit to collect collateral may not be economically worth pursuing. To make matters worse, cooperation with political leadership may not avail investors because many of the activities in Fitch's third group (and to some extent perhaps, in its second group) may not incite the same degree of relative urgency in political leadership or trigger any of the concerns we have discussed above. For example, consider an investor with a security interest in all of the property of a defaulting not-for profit hospital. Political leaders may be constrained in their actions if the hospital is of importance to the community but not otherwise. At the same time, the hospitals and its assets may be subject to liquidation utilizing traditional corporate type remedies provided for in the documents. However, the market may not provide sufficient value for the building or other assets to warrant pursuit of these remedies.[14]

<u>Federal Bankruptcy</u>

The only entity that can place a municipal issuer into federal bankruptcy is the municipality itself, and then only if it has been specifically authorized by the State by statute to file a Chapter 9 bankruptcy petition.[15] If a municipality does file a Chapter 9 petition, the petition asks the curt for debt readjustment. The role of the judge is to ensure that the reorganization plan meets the test in Section 943 before he or she confirms the plan.

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[13] James E. Spiotto, Analysis of Defaults and Remedies for Indenture Trustees and Bondholders, Practising Law Institute, Real Estate Law and Practice Handbook Series, March, 1995, (hereafter Spiotto, Defaults and Remedies) pages 17-20.
[14] Moody's Default Study at pages 10 – 11.
[15] 11 USC Section 109 (c).

A municipal bankruptcy process triggers an automatic stay similar to that which would be imposed in a commercial case under Chapter 11. The municipality must present a plan of adjustment in which it specifies how it proposes to meet its obligations. If the plan of adjustment is not presented when the petition is filed, the court will fix a date by which the plan of adjustment must be presented. A municipality that has filed a petition makes payments to its creditors only in accordance with the plan of adjustment. Accordingly, to be recognized as a claimant, creditors of a municipality must file a proof of claim or be placed on its list of creditors by the municipality. A recognized creditor can vote for or against the plan of adjustment. The plan of adjustment must have the consent of two-thirds of the allowed amount of each class and more than one-half in number of the creditors of each class. If the judge concludes that the plan does not discriminate unfairly and is fair and equitable with respect to each of the impaired claims (those receiving less than is owed to them) that has rejected the plan, the court may choose to confirm the plan.

The specific impact of a municipal bankruptcy filing on bondholders depends on the status of the bondholder. The process seeks to protect the pre-existing rights of secured creditors as against other secured creditors. The Act defines a secured claim as one that involves a charge against or interest in property, i.e., a lien on property.[16] The holders of general obligation bonds are unsecured creditors because the right to insist that the municipality exercise its taxing authority is not a lien on property under Chapter 9. In addition, the general obligation bondholder is subject to the automatic stay and may therefore need to await confirmation of the plan of adjustment before receiving any payments under the plan. The general obligation bondholder may conclude that notwithstanding its lack of an interest in the municipality's property, the obligation of the municipality to impose taxes to meet its payment obligation to bondholders will be imposed as part of the plan confirmation process. However, the US Constitution limits Congressional authority to interfere with the States. This constitutional concern is reflected in Act provisions that the bankruptcy court may not, by any stay, order or decree, in the case or otherwise, interfere with – (1) Any of the political or governmental powers of the debtor; (2) Any of the property or revenues of the debtor; or (3) The debtor's use or enjoyment of any income-producing property. [17]

Commentators believe that notwithstanding this language, a judge may refuse to approve a plan that does not specify tax increases which would expose the municipality to State creditor remedies such as mandamus (discussed above) or find, that as a matter of law, a reorganization plan without a tax increase is not in good faith or would not meet the statutory threshold that the plan be in the best interests of creditors.[18] In any event, a US Supreme Court decision provides guidance on the proper parameters for directing an increase in taxes[19] and there is therefore some evidence that a federal court may properly

[16] 11 USC Section 506. See also, 11 USC Section 101 (5) (10) and (51).
[17] 11 USC Section 904. See, analysis in Kevin A. Kordana, Tax Increases in Municipal Bankruptcies, 83, Va. L. Rev. 1035, 1997.
[18] See, 11 USC Sections 901 (a), 943 (b) (7) and 1129 (a) (3).
[19] See, Missouri v Jenkins, 495 US 33 (1990). The principles governing the issue are clearly stated by the Court and merit discussion here. "We turn to the tax increase imposed by the District Court. The State

exercise this power under appropriate facts, although the Court characterized this as extraordinary and a last resort.

Revenue bondholders are secured creditors because they have a claim to the specific cash flow associated with the financed project. This collateral is a lien that survives filing of the petition[20] but the claim is limited to the value of the income stream secured by the lien. If the amount of the collateral is less than the amount due on the revenue bonds, the revenue bondholders lack even unsecured status for that amount. The status of other bondholders will likewise depend on the kind of analysis discussed above.

Most commentators conclude that Chapter 9 provides municipalities with a powerful bargaining tool: the municipality cannot be placed in bankruptcy involuntarily, will only file a petition if it has established this will get it valuable protection from its creditors; and the court lacks authority to order it to dispose of its property. Under the analysis presented, overall, the legal rules applicable to municipalities and investors in a default situation would seem to encourage both the relevant government officials and bondholders to work toward a common solution to produce a reorganization plan or other out of court resolution.

d. Mechanisms of State Intervention

Some municipalities in financial distress have sold long-term bonds to specific investors to obtain the funds necessary to repay short-term obligations and recover their financial footing. When this is not possible, next level government intervention is necessary. Such interventions to resolve troubled municipalities have taken a number of different forms, such as cash advances to keep the troubled municipality current in its obligations. States have created new authorities to issue their own bonds, the proceeds of which were loaned to the municipality to fund on-going operations in exchange for the pledge and diversion of specific municipal revenues to the authority. Such measures have usually been paired with a financial oversight board whose function it is to evaluate the causes of the financial instability and return the municipality to a sound financial and operational footing. Municipalities with obligations secured by specific and sufficient pledges of revenues have proactively filed "surgical" federal bankruptcy petitions in order to shed or lower financial obligations owed to employees or others and thereby minimize the drain on revenue that can be used to satisfy debt holders. In these situations, bondholders were

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urges us to hold that the tax increase violated Article III, the Tenth Amendment, and principles of federal/state comity…we agree with the State... it is accepted by all the parties, as it was by the courts below, that the imposition of a tax increase by a federal court was an extraordinary event. In assuming … the fundamental and delicate power of taxation the District Court not only intruded on local authority but circumvented it altogether. Before taking such a drastic step the District Court was obliged to assure itself that no permissible alternative would have accomplished the required task…one of the most important considerations governing the exercise of equitable power is a proper respect for the integrity and function of local government institutions...The District Court believed that it had no alternative to imposing a tax increase. But there was an alternative…it could have authorized or required KCMSD to levy property taxes at a rate adequate to fund the desegregation remedy and could have enjoined the operation of state laws that would have prevented KCMSD from exercising this power. 855 F.2d, at 1314;…

[20] 11 USC Section 928. However, the statute makes the claim subject to the payment of normal operating expenses.

previously notified of the filings and its limited objective, and steps were taken to ensure bondholder obligations were carefully excluded from the filing. Since the objective of these various interventions is to provide the municipality freedom from suit while solutions are found to fix underlying problems, some commentators suggest another approach would be to establish uniform state laws which would provide for a stay of litigation for a specified time period applicable to the troubled municipalities and its investors.[21]

[21] See, James E. Spiotto, Ripple or Tidal Wave, at pages 15-18.