Municipal Bond Rating In India: An Appraisal

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Abstract
Since 1994, as part of the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) Central Government in India has been enabling Urban Local bodies to access the bond market. The Indo-US Financial Institution Reform and Expansion (FIRE-D) project is working with national, state and local governments in India to develop a market-based municipal bond market. Several Urban Local Bodies (ULBs) and utility organizations in India have issued municipal bonds that so far have mobilized over 12,884 million rupees through taxable bonds, tax-free bonds and pooled financing. However, Municipal bond market in India is still at a budding stage. Despite the early success of Bangalore Mahanagara Palika and Ahmadabad Municipal Corporation, Indian Municipal bond market has not yet evolved fully and it accounts for a mere 0.1% of the total corporate bonds traded in India. Municipal bond market in India has not realized its full potential due to a number of constraints and this includes the poor image of municipalities. Under this background, municipal bond rating is becoming one of the key factors for growing of the market. In this paper various facets of municipal bond rating in India, i.e. need for rating, methodology adopted by various credit rating agency, status of rating so far and future prospect are discussed here. Mainly secondary data has been used for this study.

L. Prelude
The bond market in India has grown significantly in recent years, in terms of issuers and investors, instruments, trading volume and also market awareness. The Government of India (GOI) issues treasury bills, zero-coupon bonds, floating rate bonds and inflation-indexed bonds. For public sector companies, the main issues comprise taxable and tax-free bonds, while the private sector companies issues bonds and debentures, zero-coupon bonds, and floating rate bonds. At sub-national levels, the state level public enterprises issue government-guaranteed bonds. In this respect, a key development in the sphere of infrastructure financing in India has been the emergence of a municipal bond market.
The fiscal reforms initiated at the centre since 1990’s had put considerable pressures on the state finances, by reducing grants, subsidies, loans, and other forms of transfers from the central government. Again the economic reform had their own way for the private sector participation in the provision of urban infrastructure and civic services, thereby to an extent also amplified the capabilities and resource base of the local governments. At the same time, a growing urban population has been creating additional demands on infrastructure and services, requiring both short-term funds for their maintenance as well as long-term funds for producing additional facilities. But the reform in the financial sector has been gradually reducing the “directed credit” component of the financial institutions. In this context, sub-national governments has been required to seek new sources of funding, including exploring the participation of private sector in service delivery. The concept of municipal bonds as an instrument for raising finance for urban infrastructure projects which had been playing a vital role in creating urban infrastructure projects in the United States of America (USA) and Canada was initially outlined in a seminar held in 1995 and subsequently shaped by an Expert Group on the Commercialisation of Infrastructure Projects, known as the India Infrastructure Report.

2. Objectives and methodology of the study
The present study has been taken with an overall view to make an empirical assessment on rating of municipalities in the context of importance of municipal bond in urban infrastructure financing in India; accordingly, the reminder of the paper is organised as under. Section three discusses on the concept of municipal bond. Section four narrates the importance of municipal bond. Section five elaborates the municipal bond market in India. Section six and seven describe the need for rating of financial instruments and/or institutions and credit rating of municipalities in India. Section eight narrates key considerations taken up by various rating agency in India as well as abroad for rating. Section nine makes an empirical assessment on status of credit rating of municipal bond in India so far and the last chapter i.e. section ten is devoted for concluding observations.

The study is basically exploratory in nature and depends exclusively on secondary data. Secondary data are collected from various reports on municipal bond market in India published by GOI, RBI and NIUA, World Bank and also various research studies taken up by the scholar.

3. What is Municipal Bond?
A municipal bond is an evidence of the obligation of a ULB to repay a fixed principal amount on a certain maturity date along with the interest, at a stated or formula-based rate (Dirie, 2005). Municipal bonds have advantages in terms of the size of borrowing and the maturity period which may extend up to 20 years. Both these features are suitable for urban infrastructure financing. Further, if properly structured, municipal bonds can be issued at interest costs that are lower than the risk-return profile of individual. The municipal bond mode of financing allows both the borrowers and the lenders to have greater flexibility. Local government bond issuers are likely to be less restricted by annual budget cycles and the capital grants’ decisions of higher levels of government (Mehta and Satyanarayana, 1999). Further, they can unbundle their functions, which enables them to make separate decisions about the placement of their liquid deposits and about obtaining advice regarding the financial and/or technical components of their infrastructure projects (Peterson, 2003). However, it should be noted that the danger of such unbundling is that a credit partner who understands various aspects, especially the financial impacts of different activities of the ULB on each other, would be absent (Peterson, 2003). The flexibility available to the lenders arises out of the possibility of trading municipal bonds prior to the end of their tenor in the secondary bond market. Liquidity in such a market is essential for the development of the primary municipal bond market.
4. Benefits of Municipal Bond
Financing based on borrowing from the capital markets is expected to impose market discipline as only those projects would be undertaken that give a sufficient return on the investment and which lay emphasis on mitigation of risk and strong institutional structures (Mehta and Satyanarayana, 1999). Municipal bonds have advantages in terms of the size of borrowing and the maturity period, often 10 to 20 years. Both these features are considered ideal for urban infrastructure financing. Further, if appropriately structured, municipal bonds can be issued at interest costs that are lower than the risk-return profile of individual ULBs. While the initial transaction costs of accessing this market are high—since a ULB needs to invest in meeting the pre-requisites of its first bond issue—as the issue size and frequency increase over time, competencies develop, thereby reducing the transaction costs. Peterson (2003) elaborates on the benefits of municipal bonds over borrowing from a commercial or municipal bank. First, banks must establish a ‘relationship banking’ scenario; however, purchasers of bonds are not obligated to have a long-term relationship with the issuer. Moreover, market competition of this kind that focuses on the cost of capital is expected to produce savings for experienced issuers. Second, while the loan departments of banks are required to possess proprietary information regarding a particular ULB—and they must develop techniques to ascertain the creditworthiness of the ULB—a municipal bond market relies on public disclosure of financial and other information by the ULB. Credit rating agencies use extensive methodologies to assess the creditworthiness of issuers, including ULBs, in bond markets. Third, most commercial banks focus on short-term lending, which is appropriate for incremental financing but not for long-term financing. Further, debt financing has advantages over grants from higher levels of government. As highlighted by the Report on Indian Urban Infrastructure and Services (2011), debt financing entails an obligation to repay. Hence, ULBs are constrained to duly plan, design and execute projects with the objectives of obtaining adequate revenues, minimizing operation and maintenance (O&M) costs, and generating a surplus over the O&M costs, which is sustained over the lifetime of the asset created (GoI, 2011). On the other hand, grants have a tendency to result in soft budget constraints, leading to wasteful expenditure. The municipal bond mode of financing allows both the borrowers and the lenders to have greater flexibility. Local government bond issuers are likely to be less restricted by annual budget cycles and the capital grants’ decisions of higher levels of government (Mehta and Satyanarayana, 1999). Further, they can unbundle their functions, which enables them to make separate decisions about the placement of their liquid deposits and about obtaining advice regarding the financial and/or technical components of their infrastructure projects (Peterson, 2003). However, it should be noted that the danger of such unbundling is that a credit partner who understands various aspects, especially the financial impacts of different activities of the ULB on each other, would be absent (Peterson, 2003). The flexibility available to the lenders arises out of the possibility of trading municipal bonds prior to the end of their tenor in the secondary bond market. Liquidity in such a market is essential for the development of the primary municipal bond market. However, it ought to be noted that the aforementioned advantages of a municipal bond market can only be realized when a sound fiscal and regulatory framework is established to create an enabling environment for developing the market. Such a framework would need to clearly address various aspects of this market, such as ex ante borrowing activities of ULBs, ex post procedures regarding municipal default and insolvency, and domains that involve shared responsibilities between different levels of government in a federal state (GoI, 2011).

5. Municipal Bond Market in India: Size and Structure
For financing investment particularly in building urban infrastructure to the tune of US$ 800 billion (GoI, 2011), fiscal transfers from the higher levels of government to ULBs will not be sufficient;
hence, the role of unconventional modes of finance is expected to increase. While the municipal bond market remains at a budding stage, the Government of India realizes that the debt route could become increasingly important in the future. As part of the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), GOI has made some efforts to enable ULBs to access the bond market. Since 1994, the Indo-US Financial Institution Reform and Expansion (FIRE-D) project is working with national, state and local governments in India to develop a market-based municipal bond market. Several ULBs and utility organizations in India have issued municipal bonds that so far have mobilized over 12,884 million rupees through taxable bonds, tax-free bonds and pooled financing (Vaidya et al 2008). The Government of India (GOI), recognizing infrastructure’s key role in the process of economic development, set up the expert group on the commercialization of Infrastructure, often known as the Rakesh Mohan Committee, in 1994. The FIRE-D project worked closely with this Committee to provide international experience on tax-free municipal bonds. The Committee recommended private sector participation in urban infrastructure development and accessing capital markets through issuing municipal bonds.

Bangalore Mahanagara Palike (BMP) was the first ULB to have raised resources through private placement of municipal bonds in 1997 and Ahmadabad Municipal Corporation (AMC) was the first to make a public offering in January, 1998. It issued 1,000 million rupees in bonds to partially finance a 4,390 million rupees water supply and sewerage project. This was a remarkable achievement since it was the first municipal bond issued in India without a state guarantee and represented the initial step toward a fully market-based system of local government finance. Since 1998, other cities that have accessed the capital markets through municipal bonds without state government guarantee include Nashik, Nagpur, Ludhiana, and Madurai (Table 1). In most cases, bond proceeds have been used to fund water and sewerage schemes or road projects. Till now only 28 municipal bond issues have taken place in India, which have included taxable and tax-free bonds and pooled financing issues. Most of these have been private placements rather than public offers. A look at the trend in the value of municipal bond issues since 1997 suggests that the value of municipal bond issuances that were on a rise till 2005 has seen a sharp fall since then and there has been very few issuances since 2007 and practically no issue after 2010 (Khan, 2013).

Municipal bond market in India is still at a budding stage. Despite the early success of BMP and AMC, Indian Municipal bond market has not yet evolved fully and it accounts for a mere 0.1% of the total corporate bonds traded in India (Bhattacharya, 2014). Municipal bond market in India has not realized its full potential due to a number of constraints. These include, among others, regulatory restrictions on investment allocation by long term investors, dominance of banks and poor image of municipalities. Against this backdrop, the credit rating exercise initiated by the GOI for the ULBs under JNNURM is a commendable step.

6. Need for Credit rating

A credit rating is an independent opinion on the future ability, legal obligation and moral commitment of a borrower to meet its financial obligations of interest and principal in full and in a timely manner. Rating is important to issuers for two key reasons: (i) investors are reluctant to buy bonds if they are not rated; in several countries, the central government does not permit sub-sovereigns to sell unrated bonds,13 (ii) the rating often serves, particularly in countries where interest regimes are allowed to operate freely, to determine the interest rate at which sub-sovereigns can issue debt in the capital market. The riskier the ability of a borrower to service debt payments, the higher the interest rate sub-sovereigns have to pay. Credit rating is mandatory for debt instruments with a maturity exceeding 18 months. The three major credit rating agencies, viz., Credit Rating Information Services of India Ltd
(CRISIL), Investment Information and Credit Rating Agency (ICRA) and Investment Information and Credit Rating Agency (CARE) together with their partners (Standard and Poor’s, Moody, and Fitch Ratings) serve the Indian market in terms of rating bonds and debentures and other papers.

7. Credit rating of Municipalities in India

Credit rating of municipalities reveals the strength, weaknesses and prospects of the municipal corporations to potential lenders or investors or partners. It is a vital determinant of cost of borrowing when the municipalities try to access capital markets. A credit rating of municipalities increases their choice of debt instruments, be it bond, or pooled finance instrument or commercial bank loan at favourable terms of borrowing. At the same time, it helps them to better match their debt structure with the useful life of the assets being financed. Bond issues certified by independent credit ratings may foster a strong culture of market discipline, better disclosure level, improved financial planning, fiscal prudence among ULBs and ultimately lead to a greater efficiency in their operations. A higher rating provides the ULBs with leverage over their weaker counterparts in raising fund at easier terms. Even if a municipality does not have any plan for bond issue, it may opt for ratings its operation. A commendable rating is a sign of its sound health, which the municipality might capitalize in its future ventures.

In 1997, CRISIL drawing upon the experiences of its partner, the Standard and Poor’s Rating Services of USA, undertook an exploratory exercise to evaluate the operation quality of municipal entities in India for the first time, with a view to explore the feasibility of expanding the horizons of its rating operations. It involved the Ahmedabad Municipal Corporation (AMC) and other municipal corporations in formulating what it called, a framework for municipal credit evaluation, and laid out the groundwork for credit rating of municipalities and project specific debt issues. CRISIL studied the finances and operations of the Ahmedabad Municipal Corporation (AMC), and assigned a “A+” credit rating to the proposed 1 billion rupees bond issue, indicating a credit risk profile in the adequate safety category. Since then, the municipal bond market in India has seen a noticeable growth in terms of issuers and investors, instruments, and volume of transactions. Following the example of Ahmedabad Municipal Corporation (AMC), a number of municipal entities have since accessed capital market funds, with the back-up of CRISIL and two other credit rating agencies namely, ICRA and CARE who have developed their own criteria and systems for evaluating the creditworthiness of municipalities.

8. Criteria for rating Municipalities in India

8.1 Indian Credit rating Agency

8.1.1 CRISIL methodology

CRISIL’s rating methodology involves an in-depth assessment of the following factors –

- **Legal and administrative framework** -
  - Municipal functional domain as defined by the relevant act.
  - Decision making process.
  - State government transfers.
  - Tax rates & basis of assessment.
  - Borrowing powers & ability to pledge revenues.
  - State government & municipal linkages.

- **Economic base of the service area** -
  - Population base and growth rate.
  - Level of industrial and commercial activity.
  - Diversity and elasticity of tax base.
✓ Per capita income levels.
✓ Prospects for widening of tax base

❖ Municipal finances -
✓ Quality of Accounting.
✓ Overall surplus/deficit on revenue account.
✓ Profile and trends in tax and non tax revenues.
✓ Property tax effort: *Demand raised, rates, systems*.
✓ Dependence on SG transfers: *Stability & transparency*.
✓ Expenditure profile: *Head wise & activity wise*.
✓ Capital receipts and expenditures – Trends.
✓ Debt profile: *Cost, tenure & coverage*.
✓ Future sources of revenue growth.
✓ Measures to curtail revenue expenditure.

❖ Existing operations of the municipal body -
✓ Range of services: obligatory/discretionary functions.
✓ Core services: Water, sewerage facilities, primary education & health, etc.
✓ Systems in place for delivery of these services.
✓ Level and trend of past expenditure on these services.
✓ Proposed level of service enhancement.
✓ Major projects undertaken.

❖ Managerial assessment -
✓ Linkage between financial health & initiatives taken by a proactive management.
✓ Organizational structure.
✓ Administrative systems and procedures.
✓ Project management skills.
✓ Level of control on expenditure.
✓ Initiatives taken to enhance resources and improve collection mechanisms.

❖ Project specific issues -
✓ Proposed projects.
✓ Project tenure and funding patterns.
✓ Debt servicing requirements due to new projects.
✓ Existing level of service & improvements envisaged.

❖ Credit enhancement structure -
✓ Escrow of specific tax revenues
  o Ensure non co-mingling of cash flows.
  o Level of collateralization.
  o Reliability of source (e.g. octroi).
✓ SG guarantee
  o Credit quality of guarantor.
  o Legal validity.
  o Conditional/unconditional.
  o Irrevocability.
  o Trustee’s powers to invoke guarantee.

8.1.2. CARE methodology
The rating methodology adopted by CARE considers the following parameters:
❖ Fiscal profile of the bond issuing municipal body -
✓ Composition of revenue and expenditures, revenue surplus or deficit and its margin.
✓ Availability of general revenues to meet short-term delays in debt servicing of project-linked debt instruments.
✓ Availability of financial resources to meet unforeseen contingencies.
✓ Quantum of state budgetary support.
Nature of operating expenses.

- **Debt specific factors** -
  - Delays in past loan repayments.
  - Current debt burden and debt service coverage ratio.
  - Degree of reliance on short term borrowings.
  - Maturity profile of the bond.
  - Pending litigations affecting the repayment status of debt.
  - State government approvals for borrowings.
  - When the bond proceeds are to be used to finance a new project, viability of the new project in terms of the constitution of the project as a special purpose vehicle (SPV) or as a departmental project.

- Sources and allocation of funds for the project being financed and analysis of major project related revenues and expenditures are assessed.

- Profile of the project being financed and its related risk factors and also prioritization of expenditure across projects.

- Economic Factors.

- Revenue streams for repayment of Bonds.

- Organizational structure, management information system, tax billing, collection and enforcement mechanism, ability to implement plans and degree of autonomy given to the local body.

- Administrative Capability of the officials at the local government level.

- Legal set-up within which the local body operates including the power to raise debt, responsibility to repay debt and power to authorize specific issues.

- Inter-governmental fiscal structure.

- State of the local economy, local employment characteristics and demographics and development indicators.

CARE’s methodology carefully analyses the linkages between the above-stated factors, while assigning an appropriate rating to the debt instrument.

**8.1.3. ICRA methodology**

The ICRA has assessed a number of municipal entities in terms of assigning credit rating for bond issues. Although the criteria for evaluating bond issues by ICRA are not published, a study of the rating rationales gives an indication of the underlying rating philosophy and broad criteria. They look at the overall profile of the issuer municipality in terms of -

- Overall profile of the issuer in terms of the area that it services together with its demographic and socioeconomic profile.

- Financial performance of municipalities in terms of the organization of accounts, past revenue and expenditure profiles, revenue surplus or deficit, past capital expenditure schedule, liquidity position, and debt profile.

- Trends, composition and expenditure patterns of key operating departments of the municipalities.

- Appraisal of the on-going and proposed projects from the point of improvements in service delivery and funding arrangements.

- Demographic profile within the municipal limits.

- Social economic indicators in the district in which the municipality is situated.

- Detailed financial assessment of the past financial performance.
8.2. Criteria for rating Municipalities in India by the International Credit rating Agency

8.2.1. Standard and Poor’s Credit rating methodology

The analytical methodology focuses on -

✓ Range of economic system and administrative factors.
✓ The parameters affecting the local economy which include economic structure, growth prospects, and demographic profile of population.
✓ Budgetary performance and flexibility therein, expenditure trends, liquidity, debt burden and off-balance sheet liabilities.
✓ Assessment of the system structure and management in terms of inter-governmental linkages, stability and supportiveness of the higher levels of government, revenue and expenditure balance and management systems and policies.
✓ Entities own financial position.
✓ Evaluates Sovereign related factors and credit profile of local governments.

9. Status of Municipal Bond rating in India

Rating status of some of the municipal bond issued by various Municipal Corporation in India are given below -

Table: 1 Municipal Bond rating in India by various Indian credit rating agency

<table>
<thead>
<tr>
<th>Name of Municipal Corporation / (Year of issue)</th>
<th>Amount (in Million rupees)</th>
<th>Placement</th>
<th>Guarantee</th>
<th>Escrow</th>
<th>Purpose</th>
<th>Rating</th>
<th>Rating Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahmadabad Municipal Corporation (1998)</td>
<td>1,000</td>
<td>Public and Private</td>
<td>No</td>
<td>Octroi from 10 octroi collection points</td>
<td>WS &amp; S project</td>
<td>AA – (SO)</td>
<td>CRISIL</td>
</tr>
<tr>
<td>Ludhiana Municipal Corporation (1999)</td>
<td>100</td>
<td>Private</td>
<td>No</td>
<td>Water &amp; Sewerage taxes and charges</td>
<td>WS &amp; S project</td>
<td>LAA – (SO)</td>
<td>ICRA</td>
</tr>
<tr>
<td>Nasik Municipal Corporation (1999)</td>
<td>1,000</td>
<td>Private</td>
<td>No</td>
<td>Octroi from four collection points</td>
<td>WS &amp; S project</td>
<td>AA – (SO)</td>
<td>CRISIL</td>
</tr>
<tr>
<td>Nagpur Municipal Corporation (2001)</td>
<td>500</td>
<td>Private</td>
<td>No</td>
<td>Property tax and water charges</td>
<td>WS project</td>
<td>LAA – (SO)</td>
<td>ICRA</td>
</tr>
<tr>
<td>Madurai Municipal Corporation (2001)</td>
<td>300</td>
<td>Private</td>
<td>No</td>
<td>Toll tax collection</td>
<td>City road projects</td>
<td>LA + (S)</td>
<td>ICRA</td>
</tr>
</tbody>
</table>

Source: Sheikh S. & M.G. Asher (2012). ‘A case for developing the municipal bond market in India’ and website of CRISIL and ICRA

10. Conclusion

Credit ratings for the municipal corporations/municipal councils of the 63 JNNURM cities are being released regularly which shows that only 40% of them have been rated as investment grade. Certain constraints e.g. perpetual operational deficit of ULBs, absence of required skills required to
understand the commercial borrowing market and structuring debt obligations, lack of professionalism in the management of cost and finance, restricted autonomy of ULBs to decide on their own revenues etc. leads towards a low rating for the corporations. GOI realising the necessity for growing municipal bond market for financing rapid urbanisation need has taken various steps for improving the operational efficiency of the ULBs. However the municipal corporation has to identify their weakness and should take every possible step to improve their credit rating. Getting a good rating gives municipalities an extra mileage as they can raise capital at lower cost. It also helps municipalities negotiate various contracts in favourable terms. Ultimately, all these lead towards a greater and sustainable civic benefit through rapid urbanisation.

References


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