



Creditworthiness Assessment – An Approach for Indian Cities

CWAS-CRDF-CEPT University
April 2024
Executive Summary



Acknowledgements

Urban infrastructure projects tend to be capital intensive and not only require upfront capital investment but also annually recurring operations and maintenance expenditures. Recent estimates from the World Bank show that less than 20% of the largest 500 cities in developing countries are deemed creditworthy in their local context, severely constricting their capacity to finance investments in public infrastructure. Enabling cities to become creditworthy is an essential first step in gaining access to more substantial, long-term, sustainable investments. The creditworthiness of a city is a vital component of its ability to finance urban infrastructure projects, particularly in terms of attracting investment and issuing bonds.

In this context, this study of a creditworthiness framework for Indian cities was carried out by the Center for Water and sanitation, CRDF. The research team included Ms. Sujatha Srikumar, Ms. Saubiya Sareshwala, Dr. Meera Mehta, Dr. Dinesh Mehta, Mr. Dhruv Bhavsar and Ms. Aashini Sheth.

Meera Mehta, Dinesh Mehta

Professor Emeritus and Center Heads,

Center for Water and Sanitation (CWAS), CRDF, CEPT University

Executive Summary

There is an increased recognition that addressing financing gaps for urban infrastructure requires a focus on mobilizing domestic resources beyond our intergovernmental transfers. In this context, the past experience in accessing debt through municipal bonds in India assumes importance. Creditworthiness of cities is critical for unlocking domestic resources from the private sector and markets. In this context, regular assessment of creditworthiness of urban local bodies (ULBs) assumes importance.

Over the years, many formal credit rating exercises have been carried out in India for municipal bond issues and issuer credit assessments of ULBs. These activities are often time-consuming and require considerable human and financial resources with no assurance of to an investment grade rating, the starting point for fund raising. Regular creditworthiness assessments of a city can be an important indicator of its ability to finance urban infrastructure, particularly by attracting private investment, mobilizing funds through municipal bonds or by borrowing from commercial banks. Cities with low creditworthiness will struggle to raise such funds. On the other hand, an investment grade credit rating can be the first step in a ULB's journey to unlock a wide range of funds. This suggests the need for a regular assessment of creditworthiness of ULBs. It can both provide ULBs with an initial assessment as well as suggest ways to improve. To address this need, we have developed the PAS Creditworthiness Assessment Framework, which relies on publicly available information. It will help guide cities to carry out their own assessments and identify improved measures.

PAS Creditworthiness Assessment Framework

The PAS Creditworthiness Assessment Framework has been developed on the basis of rating approaches used by different rating agencies in India, as well as similar efforts done in other countries. It includes both financial and operational parameters. The financial parameters include revenue base represented by revenue size and financial performance, expenditure management, liquidity profile and leverage ratios. The non-financial operational parameters of service performance for water supply, sanitation and wastewater management and solid waste management. These include coverage, treatment adequacy, human resource adequacy, grievance redressal mechanisms, cost recovery, collection efficiency, accounting quality and transparency.

PAS Creditworthiness assessment has been initially tested for 30 municipal corporations across ten states in India. Table 1 shows the selection of cities. Their selection is based on availability of data in public domain as well as population size. The population of these cities ranged from a. Four million plus b. One-four million and c. Less than a million

Table 1 Cities selected for testing creditworthiness assessment framework

Population Size	Cities
4 million plus	Ahmedabad, Surat, Pune, Lucknow
1- 4 million	Aurangabad, Pimpri Chinchwad, Vadodara, Rajkot, Warangal, Ranchi, Raipur, Indore, Dhanbad, Agra, Bareilly, Moradabad, Prayagraj, Madurai, Vishakhapatnam, Vijayawada, Lucknow
Less than 1 million	Jalgaon, Chas, Satna, Saharanpur, Nizamabad, Jamnagar, Erode, Bhilai, Bilaspur, Tumakuru

Our analysis shows that out of 30 cities, 27 cities have investment grade rating.

From the universe of 30 cities, seven cities (23%) with a creditworthiness assessment score ranging from 71-90 have high quality of creditworthiness. Pune has the highest level of creditworthiness with a AA rating within the universe of cities. It is followed by PCMC, Surat, Vadodara, Ahmedabad and Indore. All four million plus cities have high level of creditworthiness.

Table 2 Results of Creditworthiness Assessment of 30 cities in India

Creditworthiness Score	Rating	Cities	Creditworthiness assessment	Grade of investment
Above 90	PAS AAA		Highest level of creditworthiness	Investment Grade
71-90	PAS AA	Pune, PCMC, Surat, Vadodara, Indore Ahmedabad, Vishakhapatnam	High level of creditworthiness	
61-70	PAS A	Vijayawada, Jamnagar, Jalgaon, Bhilai, Raipur, Lucknow	Adequate level of creditworthiness	
51-60	PAS BBB	Rajkot, Chas, Aurangabad, Moradabad, Tumakuru, Warangal, Agra, Ranchi, Bilaspur, Madurai, Satna, Prayagraj, Saharanpur, Nizamabad	Moderate level of creditworthiness	
41-50	PAS BB	Dhanbad, Erode, Bareilly	High level of credit risk	Below Investment Grade
31-40	PAS B		Higher level of credit risk	
21-30	PAS C		Highest level of credit risk	
Less than 20	PAS D		Not creditworthy	

Potential Borrowing by ULBs

The Ministry of Housing and Urban Affairs (MoHUA) has developed an enabling framework and environment for borrowing for Indian cities. From the 30 cities in our sample, 26 cities (86%) have the ability to borrow from the market. The borrowing capacity of a city is dependent on its annual operating surplus prior to depreciation and interest.

Based on prevailing norms in the market for interest rates and tenor for municipal bonds, a thumb rule for assessing the borrowing capacity of the municipal corporation can be considered as 2.5 times the operating surplus prior to depreciation and interest.

Some of the larger cities with higher revenue size, including Pune, PCMC, Ahmedabad, Vadodara, Indore and Surat have already issued municipal bonds worth INR 100-200 crore each for infrastructure projects. These cities have a much higher ability to borrow from the market and other sources as compared to their current level of borrowing.

For smaller cities such as Jalgaon, Raipur, Ranchi and Warangal, borrowing capacity ranges from INR 100-500 crore. However, none of these cities have so far issued municipal bonds, despite their ability to borrow from the market. Other smaller cities such as Chas, Satna, Erode, Saharanpur, Warangal, Jamnagar, Ranchi, Jalgaon and Tumakuru have lower borrowing capacity ranging from INR 13 to 33 crore.

A few cities had operating deficit prior to depreciation and interest. These cities have existing borrowings in the form of secured and unsecured loans. Such cities will have to improve their revenue streams to sustain regular operations as well as achieve a revenue surplus in order to improve their creditworthiness score to investment grade.

Way Forward

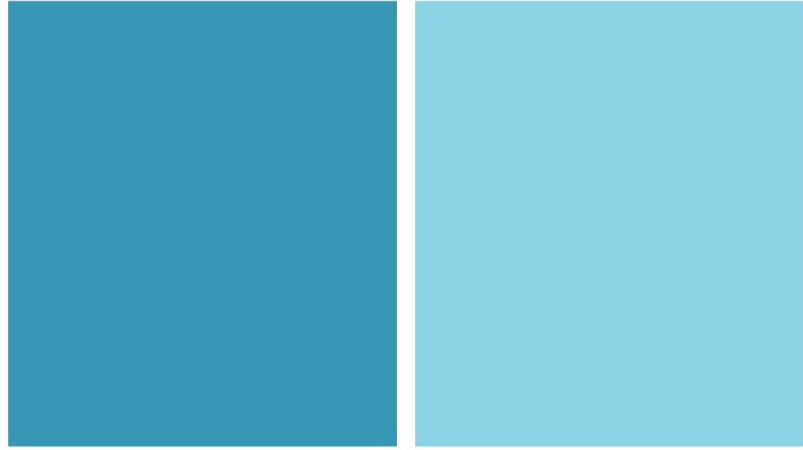
Creditworthiness assessment is a useful and almost a no-cost approach for a city to understand its own creditworthiness and to identify areas where it needs to take improvement actions before considering any borrowing and a formal credit rating. This assessment relies on indicators derived from past financial performance of the city and a review of its operational parameters. It does not include qualitative parameters such as quality of urban management, reform orientation etc. and other factors often used by rating agencies to assign the final credit rating. The proposed framework provides a creditworthiness score for a city which can be close to an actual credit assessment.

CWAS has prepared a “Do-it-Yourself” toolkit for creditworthiness assessment by ULBs themselves. Any ULB can use this tool to easily assess its creditworthiness. The main benefit that for cities, that want to explore issuing municipal bonds or raise other forms of debt, can get an indication of their creditworthiness score and likely credit rating. The assessment can also be used as a tool to evaluate ULBs financial and operational performance, as improvements in credit scores over the years under this model would indicate improvements

in operational and financial parameters. Thus, ULBs can use the creditworthiness framework and tool to assess their current financial and operational performance and identify areas for improvement prior to going for a formal credit rating for a bond issue.

Thus, the ratings provided by using this approach and toolkit can be used as a pre-cursor to actual credit ratings. Detailed creditworthiness reports generated for a city can suggest improvement actions. It will help cities to assess their borrowing capacity and in improving their credit quality before undertaking an actual credit rating process.

The Creditworthiness Assessment tool will also be useful for cities and states, for the recent Capital Investment Scheme for special assistance to states by the Government of India. It aims at improving creditworthiness of cities and making them ready to issue municipal bonds. Thus, the creditworthiness assessment framework can be scaled across other Indian cities of various sizes and population and other Indian states. It will help to assess city performance, and to identify the improvements needed in financial and operational performance to make ULBs creditworthy to issue municipal bonds and to participate in the debt market.



CENTER FOR WATER AND SANITATION

The Center for Water and Sanitation (CWAS) is a part of CEPT Research and Development Foundation (CRDF) at CEPT University. CWAS undertakes action-research, implementation support, capacity building and advocacy in the field of urban water and sanitation. Acting as a thought catalyst and facilitator, CWAS works closely with all levels of governments - national, state and local to support them in delivering water and sanitation services in an efficient, effective and equitable manner.