Rating Methodology - Urban Infrastructure Projects

[Issued in October 2022]

Background

The term 'Urban Infrastructure Projects' is used to describe projects providing water supply, sanitation, solid waste management, bridges and roads, urban transport, bus terminals, public housing, shopping complexes and other public facilities. Urban infrastructure services in India have been traditionally provided by public agencies operating at different levels of government, viz, local, state and central. These include municipalities, utility boards, development authorities and government departments. For instance, in India, water supply and sanitation are provided by different institutions in different areas. Generally, municipal corporations are responsible for capital works and maintenance, however, a few cities have metropolitan utility boards that undertake this function. In smaller cities, project implementation is done by state-level utility boards or the state's Public Health Engineering Department, whereas the maintenance function is done by the local bodies. The term 'municipal bodies' is used to describe local administrations or statutory undertakings providing civic or infrastructural services.

With the growing population in the country, there is a need to augment the urban infrastructure in the country besides upgrading the existing infrastructure set up. Urban infrastructure financing has been traditionally done through internally generated resources of municipal bodies, grants and transfers from central and state governments and funds from international organisations and domestic financial institutions like HUDCO and LIC. However, access to such funding sources is limited and budgetary allocations to municipal bodies by the State Government may vary based on the fiscal position of the State Government. Hence municipal bodies need to explore alternatives such as private sector participation and identify new sources of funds, such as municipal bonds, for financing core infrastructure projects. Financial instruments issued by municipal bodies to raise resources from capital markets are commonly known as municipal bonds. Municipal bonds are of many types, with varying durations and for different purposes, with fixed or variable interest rates. There are mainly two types of municipal bonds, viz, general obligation bonds and revenue bonds:

a. General Obligation Bonds

These bonds are backed by a pledge of the full faith and revenue raising powers (mainly tax levying powers) of the municipal corporation. The use of General Obligation Bonds (GOBs) may be appropriate for financing general municipal functions, where it may not be possible to ensure direct cost recovery from specific projects [like public utilities, roads, street lighting, public health, etc.]. Through a GOB issue, a municipal corporation with a good financial position can use its overall creditworthiness for raising finance for projects, each of which may not be commercially viable on its own.

b. Revenue Bonds

These are primarily backed by the user fees or service charges paid by the users availing of a particular service. They are used primarily for funding revenue-producing public services such as housing, water supply, toll highways, ports, airports, etc.

The municipal bond market is a specialized segment of the debt market. In the USA, most urban infrastructural projects such as water supply and sewerage are financed through the issuance of municipal bonds. Also, the secondary market for municipal bonds is active, with sufficient liquidity. Some municipal bonds are tax exempt, thereby lowering the cost of borrowing for the issuer. In India, some measures have been introduced to attract investments in infrastructural projects which include a five-year tax holiday to BOOT operators in infrastructure projects, tax benefits to financial institutions on interest and dividend income earned from financing infrastructure projects and tax benefits on investments in infrastructure.

Rating Parameters:

The parameters considered in credit rating of municipal bodies are broadly classified under the following heads:

A. Economic Base

The revenue generating capacity and fiscal health of a ULB is dependent upon the economic base of the area under its span of control. Economic conditions dictate the quantity and quality of services delivered. Therefore, the first step is the assessment of the issuer's region, infrastructure, natural assets, etc. The other factors would include the tax base, its composition and the employment base.

The ability to repay debt without excessive reliance on government grants ultimately depends on income levels in the local area. Generally, those regions with higher income levels and diverse economic bases have superior debt repayment capabilities. Hence, from a rating perspective, an area having an economically diverse tax and service base is a positive factor. However, these base strengths need to be tapped through an efficient tax structure.

Key determinants of the economic base include -

- Nature of local economy
- Local employment and income characteristics
- Development indicators and current availability of urban services

B. Legal Factors

The revenue-raising powers of municipal bodies and the degree of actual control over some of these revenues, considering consumer resistance to taxes and user charge hikes, need to be analysed. Borrowing and repayment abilities are evaluated in conjunction to the authorization(s) required for raising debt and the overall threshold on borrowing. Besides, the efficacy of collection enforcement mechanisms of municipal bodies is also assessed. Key determinants of the legal factors include:

- Borrowing powers and limits
- Pending litigations or disputes
- Powers of taxation
- Powers/Authority to levy user fee
- Actual control over revenue sources considering the political interference on tax and user charge hikes
- Collection enforcement mechanisms and restrictions on operations.

C. Administrative Factors

The organizational structure of the municipal body is analysed to evaluate the depth of management and extent of delegation of powers. The track record in project implementation reflects the project management capability as well the likelihood of completion of future projects without cost and time overruns. The ability to revise taxes, user charges and effectiveness in ensuring enforcement thereof is also reviewed. The management information systems are studied to evaluate the control and planning processes. The following parameters are usually assessed for understanding the administrative set up -

- Organizational structure
- Division of responsibilities between the various departments (viz. administrative, finance, legal etc.)
- Quality and continuity of management, extent of delegation
- Tax billing, collection and enforcement mechanism
- Track record in project implementation
- Degree of autonomy enjoyed by the municipal body
- Management Information System
- Industrial relations

D. Leverage and Debt Coverage

The rating methodology focuses on the leverage position and proposed borrowing plans to finance the development projects undertaken by the ULB. The assessment encompasses an evaluation of the overall debt level vis-à-vis the Revenue Receipts (RR) generated, amortization structure of the debt, payment priorities defined in the cashflow waterfall mechanism, etc. Some of the financial metrics assessed are debt/RR and Debt Service Coverage Ratio

Key parameters assessed here include the following -

- Composition of debt burden
- Interest and debt service coverage ratios
- Past debt service performance
- Evaluation of credit enhancement mechanisms, if any
- Commitments/encumbrances on cash flows
- Degree of reliance on short-term borrowings
- Maturity matching profile.

E. Financial Factors

The financial condition of the issuer is evaluated through an analysis of financial statements and budget/forecast. Accounting and reporting methods peculiar to municipal bodies are noted. The quality and nature of assets and liabilities as well as composition, trends and stability of revenue and expenditure and their composition are studied.

Revenue receipts and expenditure: The ability of the issuer to improve its revenue receipts through regular increases in taxes and user charges while maintaining the collection efficiency of taxes levied is evaluated. Along with this, the revenue composition is assessed to understand the contribution of the various revenue sources. The various revenue sources of a municipal corporation can be broadly classified as follows-

- Tax component – Tax revenue is levied and collected by an ULB within its jurisdiction viz property tax, vacant land tax, etc.
- Non-tax component comprises fees and user charges, rental receipts etc.
- Assigned revenue is the revenue shared with the ULB viz. share of stamp duty charges on property registration
- Government grants comprises revenue in form of State devolution, grant in aid, others etc. and
- Other income.

The percentage share of own revenue source (tax and non-tax component) to overall Revenue Receipts is evaluated as it determines the ability of the Corporation to generate revenue from its economic base without much dependence on the government grant. Along with levying of taxes, it is important to ensure efficient collection mechanism and hence, the tax collection efficiency ratio and steps undertaken by the ULB to enforce and improve the collection efficiency is also assessed.

Budgetary support from the state government in the form of grants constitute a large component of revenues in some municipal bodies. The stability of these revenues would depend on the finances of the respective state governments. Hence, for assessing the creditworthiness of these municipal bodies, credit perspective on the state governments also becomes critical (refer CARE methodology on State Government).

The ability of the issuer to curtail wasteful expenditure, improve operational efficiency, maintain revenue surplus and cash coverage is important from rating perspective.

Capital receipts and expenditure: The prioritization of past capital expenditure as well as their financial implications are examined to evaluate the financial planning process of the issuer. Also, greater flexibility of the issuer in raising resources to meet unforeseen contingencies is viewed as a credit strength. The budgetary and planning processes are studied while actual performance is measured against each year's budget/forecasts.

Factors considered for the assessment may include the following -

A. Accounting and Auditing Practices

- Systems of accounting
- Industrial relations
- Nature and quality of audit.

B. Financial Indicators

- Fiscal data on the issuer

- Budgetary and planning processes
- Tax base and past trends
- Composition and timing of revenue and expenditure, past trends
- Trends in tax rates and user charges
- Extent of cost recovery on various urban services
- Financial flexibility to meet unforeseen contingencies
- Revenue surplus/deficit
- Extent of State budgetary support
- Operating and collection efficiency
- Sources and allocation of capital expenditure, trends
- Extent of borrowings, if any, from non-governmental sources and the degree of compliance with the credit discipline imposed by such lenders

F. Project Viability

This involves an in-depth study of the project being funded including committed sources of finance, underlying assumptions on revenue and expenditure over the tenure of the instrument, extent of cost recovery through user charges, availability of general revenue for debt servicing and committed budgetary support, if any, for the above project. Credit enhancement measures, if any, are evaluated to assess impact on timely servicing of debt. Also, sensitivity analysis may be conducted for cost and time overruns, the cost of borrowing and user charge increases. In the case of a revenue bond, only revenue streams from the project are used for debt servicing. Some of the key determinants of project viability are as follows-

- Constitution of the project as a departmental project or an SPV
- Sources and uses of funds for project being financed
- Analysis of projected revenues and expenditure for the tenure of the instrument as well as the underlying assumptions
- Revenue flow pattern from the project and extent of cost recovery
- Committed budgetary support
- Sensitivity analyses to user charge hikes, cost of borrowing, etc.
- Evaluation of credit enhancement measures, if any.

Conclusion

The rating outcome is ultimately an assessment of the fundamentals and the probabilities of change in the fundamentals. CARE Ratings analyses each of the above factors and their linkages to arrive at the overall assessment of the credit quality of an issuer. While the methodology encompasses comprehensive technical, financial, commercial, economic and management analysis, credit rating is an overall assessment of all aspects of the issuer.

[For previous version please refer 'Rating Methodology – Urban Infrastructure Projects' issued in August 2020]

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