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Market-Based Financing of Urban Infrastructure

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A market-based approach to financing urban infrastructure linked with JNNURM will further strengthen ULBs and help achieve the decentralization objective of the 74th Constitutional Amendment

RAPID URBANIZATION has increased the demand for urban infrastructure in India. Since public funds for these services are inadequate, Urban Local Bodies have to look for alternative sources for financing their infrastructure needs. Accessing capital markets has emerged as viable options for ULBs to finance urban infrastructure. Several urban local bodies and utility organizations have issued bonds and have so far mobilized over Rs.12,000 million through taxable bonds, tax-free bonds and pooled financing. The JNNURM, a flagship urban investment program of Government of India encourages ULBs to link the projects with market-based financing. The market access is important innovation in the financing of urban infrastructure in the country.

In 2001, about 286 million persons were living in urban areas of India and it was the second largest urban population in the world. The proportion of urban population was 27.8% in the year 2001 and the decadal growth of urban population was 31.2% in 1991-2001.

The urban population is expected to rise to around 38 percent by 2026. It is clear that urbanization is inevitable. India needs to improve its urban infrastructure and governance to improve productivity and create jobs for the poor. Rapid urbanization has increased the demand for urban services. The Eleventh Five Year Plan of India (2007-2012), has estimated that total fund requirement for implementation of the Plan target in respect to urban water supply, sewerage and sanitation, drainage and solid waste management is Rs. 12,702 billion. Financial resources from all public sources, however, fall far short of the urban sector's estimated investment requirements. Since public funds for these services are inadequate, ULBs

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have to look for alternative sources for financing their infrastructure costs. Market-based financing has emerged as a viable alternative to finance infrastructure investments.

Market-Based Financing System

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 bond market. Several ULBs and utility organizations have issued bonds that so far have mobilized over Rs.12,249 million through taxable bonds, tax-free bonds and pooled financing (Table 1).

Table 1: Municipal Bonds in India

S. No.	Type of Bond	Amount (Rs. in Million)
1.	Taxable bonds	4,450
2.	Tax-free bonds	6,495
3.	Pooled finance	1,304
	TOTAL	12,249

Credit Rating

In 1995, the Credit Rating Information Services of India Limited (CRISIL) to develop a methodology for carrying out municipal credit ratings based on careful study of ULBs in India and international experience. Ahmedabad was the first city where this methodology was applied in India. In February 1996, Ahmedabad received a rating from CRISIL for a bond offering. This was the first rating received by a municipal bond offering in India. The municipal credit rating system has come to be regarded by India's private financial community as a solid indicator of a city's performance and competitiveness. In the last 12 years, all major rating agencies – CARE, FITCH, ICRA and CRISIL - have provided ratings for municipal and municipal enterprise bond offerings. Under JNNURM, about 52 cities have been credit rated and out of them about 42 have received investment grade rating.

Taxable Municipal Bonds

The Government of India, 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.

The Ahmedabad Municipal Corporation (AMC) was the first ULB to access the capital market in January 1998. It issued Rs.1,000 million in bonds to partially finance a Rs.4,390 million 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 first step towards a fully market-based system of local government finance. The AMC had previously instituted significant fiscal and management reforms, including improved tax collection, computerization of its accounting system, strengthening of AMC's workforce and financial management, and development of a comprehensive capital improvement program. Due to these measures, AMC was able to turn around its financial position from a cash deficit municipal corporation to achieve a closing cash surplus of Rs.2,140 million by March 1999. These reforms laid the necessary groundwork for AMC's bond issue and the successful implementation of the water supply and sewerage project.

The debt market in India for municipal securities has grown considerably since the issuance of Ahmedabad bonds. Since 1998, other cities that have accessed the capital markets through municipal bonds without state government guarantee include Nashik, Nagpur, Ludhiana, and Madurai. In most cases, bond proceeds have been used to fund water and sewerage schemes or road projects. India's city governments have thus mobilized about Rs.4,450 million from the domestic capital market through taxable municipal bonds.

Tax-Free Municipal Bonds

To boost the municipal bond market, the Government of India decided to provide tax-free status to municipal bonds. During his budget speech of 1999-2000, the Finance Minister announced the Government of India's intention to permit ULBs to issue tax-free municipal bonds. The Government of India issued guidelines for issue of tax-free municipal bonds in February 2001. These guidelines stipulate eligible issuers, use of funds, essential pre-conditions, maturing period, buy-back, nature of issue and tax benefits, ceiling amount for a project, compulsory credit rating, and external monitoring of the tax-free municipal bond. Tax-free status provided an incentive to local governments to improve their fiscal management sufficient to meet the demands of the investment community..

Ahmedabad was the first municipal corporation in India to issue tax-free municipal bonds for water and sewerage projects. In April 2002, AMC issued a tax-free 10-year bond with an annual interest rate of 9.00 percent. The bond issue amount was Rs.1,000 million. The Municipal Corporation of Hyderabad also issued a tax-free municipal bond in May 2002 for Rs.825 million. The MCH thus became the second city to issue tax-free municipal bonds. The money raised by MCH through municipal bonds was used for providing urban infrastructure in the city especially in slums. The tenure of the bond was seven years with a rate of interest of 8.50 percent.

Pooled Financing

Only financially strong, large municipal corporations are in a position to directly access capital markets. Most small and medium ULBs are not able to directly access capital markets on the strength of their own balance sheets. Also, the cost of the transaction is another barrier. In the United States and elsewhere, small local bodies pool their resources and jointly access the capital market. Based on this model, the Governments of Tamil Nadu and Karnataka issued municipal bonds by pooling municipalities.

In 2003, the Tamil Nadu Urban Development Fund issued a bond by pooling 14 municipalities for commercially viable water and sewerage infrastructure projects. A special purpose vehicle, the Water and Sanitation Pooled Fund (WSPF), was set up to issue the municipal bonds. The WSPF structured a Rs.304 million bond issue whose proceeds financed small water and sanitation projects in the 14 small ULBs. The Trust vehicle enabled the local bodies to participate in the capital market without increasing the contingent liabilities of the state and to channelize private financial resources into infrastructure investments. This was the first municipal pooled issue. It had a fifteen-year maturity and an annual interest rate of 9.20 percent. USAID provided a backup guarantee of 50 percent of the bond's principal through the Development Credit Authority (DCA) mechanism. The proceeds helped ULBs to refinance their loans at lower interest rates, connect periphery areas to new water supply schemes, and provide underground drainage and solid waste management schemes. The issue demonstrated a successful model of pooled financing in India.

Subsequently, the Government of Karnataka used the concept of pooled financing to raise debt from investors for the Greater Bangalore Water Supply and Sewerage Project (GBWASP). This project covers eight municipal towns around Bangalore and has a total project cost of Rs.6,000 million. These eight municipal towns were merged with the Bangalore Municipal Corporation. A debt fund called the Karnataka Water and Sanitation Pooled Fund (KWSPF) was established under the Indian Trust Act to access the capital market by issuing a bond on behalf of the participating ULBs. The KWSPF was created as the intermediary between the local municipalities and the capital market. The KWSPF borrowed from the market and on-lends to the ULBs at terms determined by the KWSPF. During June 2005, the KWSPF successfully floated Rs.1,000 million tax-free municipal bonds at an annual interest rate of 5.95 percent. USAID under its DCA program provided a guarantee of up to 50 percent of the principal amount of market borrowing. It is felt that the tax-free status of the bonds and the DCA guarantee lowered the interest rate by about 1.5-2.0 percent per year compared to similar credit enhancement structures and helped to extend the bond's tenure to 15 years.

The success of the pooled finance model as demonstrated in the States of Tamil Nadu and Karnataka subsequently led the Government of India to create a central fund that enables capital investments to be pooled under one state borrowing umbrella. The objective is to provide a cost-effective and efficient approach for smaller- and medium-sized ULBs and to reduce the cost of borrowing. FIRE-D project supported GoI's MOUD in formulating the Pooled Finance Development Fund (PFDF) Guidelines to help small- and medium-sized ULBs access market funds for their infrastructure projects and to encourage municipalities undertake fiscal, financial and institutional reforms required to

create efficient and equitable urban centers.

Linkages with JNNURM

The Government of India has attempted to meet the challenge of inadequate urban infrastructure through a flagship program, the Jawaharlal Nehru National Urban Renewal Mission (JNNURM). States and ULBs accessing the JNNURM must complete a total of 22 reforms, some mandatory and some optional, during the seven-year period (2005-12). The mandatory and optional reforms of states/ULBs under the JNNURM include decentralization of urban governance and empowering urban local bodies, introduction of improved accounting systems, improved revenue base, reform of rent control acts, delivery of services to poor, etc. The JNNURM encourages ULBs to access market-based financing and PPP for urban infrastructure projects that are funded by the Mission. The Nagpur Municipal Corporation issued a Rs.212 million municipal bond in March 2007 to fund a WSS project under JNNURM.

Constraints for Municipal Bonds

Supply-side Constraints are:

- Institutional investors with long-term funds face regulatory constraints on purchasing municipal bonds:
  - Institutional investors such as the insurance companies are constrained because of restrictions imposed by the investment guidelines of the Insurance Regulatory Development Authority (IRDA).
  - Commercial banks, governed by the RBI's asset and liability management (ALM) requirements, prefer to lend over the short- to medium-term as their assets and liabilities are short- to medium-term in nature.
  - Further, banks cannot take exposures to ULB financing in bonds/structured instruments due to "mark-to-market" requirements. Lending by banks in the form of loans is not subject to such requirements.
- Since there is lack of credit enhancement, hedging tools for investors to mitigate credit risk, and limited reliability of credit information, investors perceive municipal bonds to be risky.
- The fixed cap on tax-free interest from municipal bonds does not respond to market conditions. Municipal bonds become unattractive when market rates exceed the cap.
- Given the poorly developed government securities market, municipal bonds are relatively illiquid investments for lack of exit opportunities for institutional investors. Further, there is an inefficient clearing and settlement mechanism.

Demand side constraints are:

- There are too few creditworthy issuers seeking bond financing.
- There are too few financially viable projects seeking bond financing.
- There is a lack of intermediation support to help issuers achieve bond structures that respond to investor needs while providing the issuer with the longest possible tenor, lowest possible interest rate, and lowest possible cost of issuance.
- There are a variety of "administrative and managerial" constraints that inhibit and discourage potential issuers of municipal bonds. Though, the reforms initiated by the Ministry of Urban Development shall help change the situation. Presently, here is divergence of opinion on the optimal debt equity ratio for ULBs. Therefore, the rating agencies must communicate the optimal debt equity ratio for projects by ULBs.
- There is need for further clarity on how the Government of India will operationalize the sanctioning mechanism for Tax-Free Pooled Finance Development bonds.
- There is need for further clarity on how will the RBI approved credit rating agency carry out the surveillance throughout the tenor of the Tax Free Pooled Finance Development Bonds.
- Out the surveillance throughout the tenor of the Tax Free Pooled Finance Development Bonds.

The funding and reform agendas of the JNNURM and the PFDF will help to address the demand-side constraints on the use of municipal bonds. Other supply-side constraints can only be addressed by the institutions responsible for the regulation and development of India's financial markets. Therefore a Working Session is to reach consensus to

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address the key supply-side constraints that impede further development of India's long-term municipal bond market. Recommendations to the responsible institutions regarding the supply-side constraints are:

- Expand the range of "approved investments" for insurance and pension organizations to include municipal bonds of investment grade or higher. General Purpose bonds may also be included in the list of 'infrastructure' category.
- Municipal bonds to be classified under 'hold to maturity' category rather than in 'marked-to market' category.
- Specify municipal bonds under the 'priority sector' category for investment/lending purposes.
- Provision of "bond insurance" as credit enhancement may be explored as a security against default by municipal bodies.
- Review the 8% cap on interest rate for tax-free municipal bonds and prescribe a benchmark market rate linked to State Bank of India-Prime Lending Rate rather than an absolute percentage.
- Provide investment opportunity in municipal bonds to individual/retail investors, CBDT to include municipal bonds in the list of eligible investments/ subscriptions for the purpose of claiming deduction under section 80C of the Income Tax Act, 1961.
- Include municipal bonds in the list of eligible investments for Employee Provident Fund Organization.

Great progress has been made in developing the policy and legal framework for local governments to access the capital market to finance urban infrastructure. However to routinely access capital markets, ULBs will have to have the capacity to develop commercially viable projects. The most critical factor for obtaining market finance will be a healthy municipal revenue base. A market-based approach to financing urban infrastructure linked with JNNURM will further strengthen ULBs and help achieve the decentralization objective of the 74th Constitutional Amendment. ❑

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