FINANCING MUNICIPAL SERVICES

REACHING OUT TO CAPITAL MARKETS

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DECEMBER 2003

NATIONAL INSTITUTE OF PUBLIC FINANCE AND POLICY
NEW DELHI

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PREFACE

Studies on the finances of municipalities have a long tradition in India. Most studies including those that have been conducted at the National Institute of Public Finance and Policy (NIPFP) have, in the past, focused on an examination of income and expenditure of municipalities and led to the now widely-held conclusion that their finances are in a shambles. Policy prescriptions that have emanated from such studies have not gone beyond suggesting that municipalities should improve the administrative efficiency of their tax regime, and use cost recovery mechanisms for augmenting their revenue base.

With support from the United Nations Development Programme (UNDP) under its Economic Reforms Programme (IND/98/410), the National Institute of Public Finance and Policy (NIPFP) have broadened the scope of municipal finance studies to address and reach out to the relatively unresearched areas, in particular, those that are concerned with (i) the potential of capital market financing of urban infrastructure, (ii) systems of pricing urban infrastructural services, and (iii) the scope of independent regulatory mechanisms in urban services. Specifically chosen for their relevance in the context of urban reforms initiated by the Government of India, these research concerns aim at developing frameworks for municipalities to effect sustainable improvements in their finances and functioning.

The National Institute of Public Finance and Policy (NIPFP) is pleased to submit herewith three studies, viz: (1) **Financing Municipal Services: Reaching out to Capital Markets**; (2) **Urban Water Pricing: Setting the Stage for Reforms**; and (3) **Urban Water Supplying Entities: Putting Regulatory Frameworks to Work,** prepared under the Economic Reform Programme. The studies have been conducted by a team consisting of Sanjukta Ray, Sandeep Thakur, and Sarika Chaturvedi, and Om Prakash Mathur, Professor at the NIPFP as leader of the team. Others who have made substantive contributions to the studies include Dr. Dale Whittington, Professor, University of North Carolina, who served as a short-duration consultant to NIPFP, Ms. Sujatha Srikumar, Senior Vice President, Infrastructure Leasing and Financial Services Ltd. (IL&FS), and Mr. R. Raghuttama Rao, ICRA Advisory Services. Om Prakash Mathur also had the benefit of advice and valuable suggestions from Dr. Albert Breton, Professor, University of Toronto, and Dr. Kim Cuenco, Senior Urban Adviser, the World Bank, as also inputs from the participants of a UN-ESCAP Regional Workshop on Pro-Poor and Sustainable Urban Water and Waste Water Management held at Phitsanulok, Thailand, where results of studies were presented and tested, as also by other experts. On behalf of the NIPFP, I would like to express my gratitude to all of them including Ms. Rekha for word processing the study reports.

The National Institute of Public Finance and Policy (NIPFP) would like to place on record its gratitude to Mr. P. K. Deb, Joint Secretary, Department of Economic Affairs, Ministry of Finance, Mr. S. Banerjee, formerly Joint Secretary, Ministry of Urban Development and Poverty Alleviation, and Mr. Maurice Dewulf, Deputy Resident Representative and Dr. Pradeep Sharma, Assistant Resident Representative of the United Nations Development Programme (UNDP), New Delhi, for supporting the studies. We sincerely hope that support for such studies will continue.

The Governing Body of the NIPFP does not assume responsibility for the findings of the studies or of suggestions that are contained therein.

M. Govind Rao
Director

February 2004

A PREFATORY NOTE

This set of three complementary studies ① Financing Municipal Services: Reaching out to Capital Markets; ② Urban Water Pricing: Setting the Stage for Reforms; and ③ Urban Water Supply Entities: Putting Regulatory Frameworks to Work grows out of the need to continue and deepen the process of urban sector reforms which began in India with the incorporation of Part IX A into the Constitution of India and which has since spread out to such spheres as reform of property taxation, capital market financing of urban infrastructural services, and public-private partnership in urban service delivery and management. Broad-based and, to an extent, even noteworthy from a historical perspective, these reforms have meant substituting the system of using rents for estimating the annual rateable value of properties with one that relies on either the area characteristics or capital valuation, relaxing the public sector grip over service provision and often even giving up the claim that urban services, on account of the externality characteristics, are necessarily to be provided by public sector organizations, and raising funds in the capital market by escrowing a part of revenue streams rather than being dependent on state assistance and sovereign guarantees. To provide support to these reform initiatives, the Government of India have inserted a new clause in Section 10(15) of the Income Tax Act, 1961 under which interest income from municipal bonds is exempted from income tax, and followed it up with the creation of three funds, namely, the Urban Reforms Incentive Fund (URIF), City Challenge Fund (CCF), and Pooled Finance Development Fund (PFDF). The purpose of the three Funds is to provide incentives to state and municipal governments and other city-based institutions to initiate and reinforce actions in such areas as repealment of the Urban Land (Ceiling and Regulation) Act, 1976, and amendment of rent control acts, and undertake reforms that would bring about improvement in existing service levels in a financially sustainable manner.

Although seemingly broad-based, these initiatives have, thus far, made little change in either the finances or the functioning of municipalities. Municipal revenues have, in the post 1992 period, not added much buoyancy; in 2001/02, municipalities in India raised about Rs.127,500 million by way of their own revenue-raising powers, forming 0.71 per cent of the aggregate gross domestic product of states compared with 5-12 per cent in several Latin American countries, and 3.07 per cent of the total revenues raised by the three tiers of government. In proportionate terms, this scale of municipal resource-raising effort signals at best a marginal change from the pre-1992 era.

Urban service levels e.g., water supply, sewerage, solid waste disposal, citywide roads, and street lighting continue to be in an unsatisfactory state. According to the National Sample Survey, 59 per cent of urban households are connected to a private tap and others, i.e., 41 per cent of the total urban households rely on public or shared connections. Only about 30 per cent of houses in cities and towns are connected to sewerage and sewage disposal services. Nearly 20-25 per cent of the total garbage remain uncollected from roads and streets. City-wide road network is in a dilapidated state, and unable to absorb the fast growing traffic load. Street lighting is grossly insufficient to provide security to urban residents.

Notwithstanding a large unmet demand, investments in urban infrastructural services have remained within a narrow range of 2.25 to 2.5 per cent of plan outlays. Most infrastructural services are grossly unpriced, with no incentives with institutions responsible for their provision to link the cost of service provision with price or tariff. The studies owe themselves to these concerns, and addresses the following issues: what might be done by municipal governments to accelerate investments in urban infrastructural services?; what considerations should govern pricing of urban services?; and what kind of a regulatory framework should be in place so as to improve the functioning of institutions that are responsible for urban service provision? The studies underline, in this regard, the importance of a responsible municipal fiscal and financial system, simplification of existing water pricing and tariff structures, and regulatory mechanisms which are able to balance the interests of the produces and consumes of urban services.

These studies are a part of the NIPFP's continuing research programme on local government finance.

Om Prakash Mathur

February 2004
Professor

ABSTRACT

Accelerating the flow of investible resources into urban infrastructure and services, viz., water supply, sewerage and wastewater disposal systems, solid waste collection, treatment and management, citywide roads, and street lighting is central to India's economic growth and poverty reduction agenda. Current investment levels in urban infrastructural services, estimated at about 2.25 to 2.50 per cent of the total development budget, are far too low in relation to the requirements, with no signals that these levels will be stepped up in the short run. Indeed, fiscal adjustment aimed at reducing budget deficit may force a cutback in public investments in infrastructural facilities. What alternatives exist for spurring investment into urban infrastracture services? Taking note of the emergence of a capital (debt) market in the country and its sensitivity to meeting the infrastructural needs of municipalities as is demonstrated by the examples of Ahmedabad, Bangalore, Hyderabad, Indore, Ludhiana, Madurai, Nagpur, Nashik, and more recently, Thane, and simultaneously examining as to what makes some municipalities to gain access to the capital market and other municipalities to continue to rely on state government grants and loans, this study entitled **Financing Municipal Services: Reaching Out to Capital Markets** provides a framework for municipalities to assess their creditworthiness for tapping the nascent but expanding capital market for financing urban infrastructural services.

1 URBAN INFRASTRUCTURE AND INFRASTRUCTURE FINANCING SYSTEMS: AN OVERVIEW

INTRODUCTION

Accelerating the flow of investible resources into urban infrastructure and services viz., water supply and wastewater disposal services, solid waste collection, treatment and management, citywide roads, and street lighting is central to India's economic growth and poverty reduction agenda. Current levels of investment, roughly placed at about 2.25 to 2.50 per cent of total plan outlays are low, and the requirements of financial resources are substantial. The India Infrastructure Report, 1996[1] reported that the average plan provision for urban infrastructure comprising water supply, sanitation, and roads was only about 9 per cent of the investment needed for their provision and maintenance. Placing the annual aggregate investment requirements at about Rs.282 billion for the period 1996-2001 and another Rs.277 billion for the 2001-2006 period[2], the India Infrastructure Report observed that the planned investment was *woefully inadequate* for even the required operation and maintenance of core services, let alone for financing the additional requirements of core services and other urban infrastructures.

Using the estimates formulated by the Central Public Health and Environmental Engineering Organisation (CPHEEO), the Tenth Five Year (2002-07) has placed the financial requirement for 100% coverage of urban population with potable water and 75% population coverage with sewerage and sanitation at Rs.537.2 billion[3]. According to the Tenth Five Year Plan, these estimates provide at best an order of the magnitude of investment requirements and need to be better assessed with information on cost of augmentation of

1 Expert Group on the Commercialisation of Infrastructure Projects, 1996. The India Infrastructure Report: Policy Imperatives for Growth and Welfare.Vol. 1-3.

2 Table 7:11, The India Infrastructure Report.

3 Planning Commission.Government of India. 2002, Tenth Five Year Plan,pp 637.

service supplies and cost of pumping, treatment, maintenance etc. The Tenth Plan does not separately delineate the proposed plan outlays for urban infrastructure, but these are unlikely to be noticeably higher than the outlays provided in the earlier plan periods[4]. The gap between what is provided and what is required is phenomenally large and when seen in the context of large infrastructure deficits and increasing demographic pressures on infrastructure and services, it is evident that funding mechanisms and instruments that are beyond the traditional sources are needed for financing urban infrastructure and services.

THE URBAN SERVICES BACKLOG

Urban infrastructure and services in India are grossly inadequate and of poor quality. According to the 54th Round of the National Sample Survey Organisation (NSSO), although the proportion of urban households without access to safe drinking water is low-about 9 per cent,[5] nearly 40 per cent of them do not have a safe drinking water source *within* premises, and 50 per cent depend on a source other than tap water within premises.

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[4] The classification of outlays shown in the Five Year Plan does not make it possible to separately estimate the outlays proposed for urban infrastructure development. It is important to point out that even the India Infrastructure Report could not separately identify the levels of plan investment in urban infrastructural services. Moreover, as the Report indicated, in the absence of any countrywide norms of investment for such services as water supply, sewerage, roads, solid wastes, and street lighting excepting those that were developed by the Zakaria Committee in 1963 and which are for all practical purposes obsolete, different agencies have put out their own estimates of investment requirements. There is a great deal of ambiguity with respect to the backlog in services except perhaps in the case of water supply.

[5] The high population coverage of over 90 per cent tend to hide several realities regarding the operations of the water system. According to the Tenth Five Year Plan (Box 6.2.1), coverage may relate to installed capacity of water rather than the average actual supply. Coverage figures do not reveal the regularity or duration of supply or even whether the supply is made on a daily basis or less frequently. Coverage does not reveal the supplementary sources that the consumers put in order to secure themselves for any disruption in water supplies. For details, see Tenth Five Year Plan (pp.634-635).

Table 1
Urban Households without Access to Safe Drinking Water

Year	**Percentage of households without access to**		
	Safe drinking	**Safe drinking water within premises**	**Tap water within premises**
(1)	**(2)**	**(3)**	**(4)**
1981	25.87	57.00	63.90
1991	18.60	49.51	57.77
2001	9.99	39.16	50.32

Source: National Sample Survey Organisation, 54th Round, 1999.

Inadequate coverage of urban population is only one manifestation of the lack of investment in the urban water sector. The National Sample Survey Organization (NSSO) has drawn special attention to the problem of water scarcity, particularly during summer months, forcing households to resort to water purchase from informal markets together with the problem of water quality. The 54th round of the NSSO survey reported that nearly 18 per cent of households faced problems of unsatisfactory quality of water, with several states reporting significantly higher proportions of water quality problems (Assam, 52.3%; Bihar, 34.4%; Kerala, 58.4%; and Orissa, 32.5%). Conditions in respect of other urban services are equally unsatisfactory. Access to excreta disposal systems in urban areas varies between 48-70 per cent. Out of 300 cities with a population of over 100,000, about 70 per cent have partial sewerage systems and sewage treatment facilities. A survey of 345 towns with a population between 50,000 and 100, 000 revealed that nearly 95 per cent of them had no wastewater treatment facilities, and disposal of wastewater on land was the predominant mode of its disposal. Management of urban waste (about 45-50 milliontonnes annually) is severely stressed and is currently under scrutiny by the Supreme Court. A survey conducted in 1989 showed gross deficiencies in the street lighting system across cities and towns of different population size categories.[6] Growing trends towards personalized vehicles have resulted in severe congestion on roads, slowing down of traffic, and worsening atmospheric pollution. Narrow carriageway and poor road surfaces have added enormously to congestion problems. In smaller towns and cities, circulation is hampered by narrow roads and constrained by the

[6] See Chetan Vaidya and K. Mukundan, 1989. Delivery and Financing of Urban Services. Operations Research Group, Vadodara.

occupation of carriageways by other uses. Poor road construction and inadequate maintenance further hamper traffic flows.

Other problems also afflict the urban infrastructure sector. In respect of urban water supply, for instance, the Tenth Five Year Plan observes: "the problems of the sector are manifold. Transmission and distribution networks are old and poorly maintained. Consequently, physical losses are high ranging from 25-30 per cent... Most cities are unable to operate and maintain the existing systems to the full capacity. The capacity utilization has been reported to be less than 50 per cent in 40 per cent of the towns, and less than 75 per cent in a further 20 per cent of towns. There is grave danger that cities may, in many instances, slip back to lesser levels of water supply, due to poor maintenance and depletion of sources even as the population continues to grow. This may lead to a situation where the per capita availability of water by 2020 may actually decrease, unless corrective action was taken expeditiously".[7] Much of the backlogs and inefficiencies in service delivery and management are attributable to insufficient investment in both creating new facilities and maintenance of the existing systems.

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DEMOGRAPHIC PRESSURES ON URBAN SERVICES

Demographic pressures on urban infrastructure and services have mounted and are expected to mount further in the future years. During 1991-2001, approximately 68 million persons were added to the total urbanpopulation which has generated fresh demand for such services as water supply, sewage disposal system, citywide roads and street lighting. Several states such as Gujarat, Karnataka, Maharashtra, Punjab and Tamil Nadu have registered a 3-4 percentage point increase in their urban populations, which has not been accompanied by any corresponding upgradation in the level of infrastructure and services. Moreover, these pressures are likely to escalate at least until 2030 in which year, India's urban population will have reached at least 500 million persons. At the same time demographic pressures are

[7] The Tenth Five Year Plan, pp.637.

mounting, decentralization initiatives as embodied in the Constitution (seventy-fourth) Amendment Act, 1992 have transferred to municipal governments responsibilities for economic and social development, urban poverty alleviation and other subjects like environment and urban forestry. It is likely to gradually involve shifting to municipal governments responsibility for local capital budget. Also, as the Amendment takes roots, municipal governments are expected to play a greater role in setting capital investment priorities and on the revenue side, responsibilities for financing their own capital requirements.

Rapid urbanization in India is placing increasing strains on the financial capacity of governments to provide the urban services and infrastructure that will be needed to promote sustainable economic growth.

Table 2
Urban Demographic Pressures in Selected States

State	**Percentage of urban to total population**	
	1991	**2001**
(1)	**(2)**	**(3)**
Delhi	89.93	93.01
Goa	41.02	49.77
Gujarat	34.40	37.35
Haryana	24.79	29.00
Karnataka	30.91	33.98
Maharashtra	38.73	42.40
Punjab	29.72	33.95
Tamil Nadu	34.20	43.86
All India	25.72	27.78

Source: Census of India, 2001.

THE PUBLIC SECTOR DOMINANCE IN URBAN INFRASTRUCTURE FINANCING

Investing in urban infrastructuring and services has historically been a public sector activity in India. Government funds are allocated to different tiers of government and entites responsible for infrastructure provision through the Plan processes. These funds are allocated in the form of grants, equity or debt contributions to different governmental tiers and public sector corporations such as the Housing and Urban Development Corporation (HUDCO), departmental undertakings and the like. The traditional argument favouring public provision of urban services has hinged upon market failures due to their special characteristics like natural monopoly, non-excludability, externalities, low price elasticity of demand, and the like.

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Box 1

NATURAL MONOPOLY: *Most urban infrastructure services are natural monopolies and are characterized by declining marginal cost over a very large range of output. For such services, it is economically more efficient for one producer to supply the service, and since the private sector could exploit its monopolistic situation, the public sector has normally taken it upon itself to provide the services.*

EXTERNALITIES: *Many services like sanitation and solid waste disposal have significant external economies, which makes it difficult for market-based systems to provide them in adequate quantities and quality.*

NON-EXCLUDABILITY: *It is difficult to exclude users from using services such as roads and public lighting systems on grounds of non-payment for services.*

PRICE-ELASTICITY OF DEMAND: *Certain infrastructural services being basic necessities have inelastic demand, and could result in exploitative pricing unless pricing was regulated.*

Urban infrastructure and services, in particular, water supply and sewerage and roads are capital intensive activities, and have consequently been financed, in addition to the budgetary provisions, borrowings from the domestic finance and insurance companies, specialized national-level institutions such as the Life Insurance Corporation of India (LIC), General Insurance Corporation of India (GIC), Housing and Urban Department Corporation (HUDCO), the Industrial Development Bank of India (IDBI), Industrial Credit and Investment Corporation of India (ICICI), and Infrastructure Leasing and Financial Services Limited (IL&FS), and more recently the Infrastructure Development Finance Company (IDFC). Of these, Housing and Urban Development Corporation (HUDCO) has been a major provider of long term finance for housing and urban infrastructure[8]. By leveraging central government funds and raising resources directly from the capital market, HUDCO has

[8] HUDCO started financing urban infrastructural schemes in 1988/89 with a view to give specialized attention to the critical segments of infrastructure development in cities and towns.

increased its financing of urban infrastructure projects, particularly water supply, roads, and other commercial projects. HUDCO's preferred mode of financing is through the state housing boards, development authorities, and municipal corporations. All of its financing carries state government guarantees. Because local government lending involves a specialized kind of financial analysis and its development lags behind lending to central government and large private firms, specialized financial institutions have been created to meet the financing needs of local governments.

The Life Insurance Corporation of India (LIC) and General Insurance Corporation (GIC) have extended term loans to parastatal agencies for urban infrastructure projects, on the basis of state government guarantees. The role of financing and insurance companies has thus been significant in funding and financing urban infrastructure projects. Their lending for urban infrastructure and services, it should be noted, have been characterized by the directed credit regime whereunder different financial institutions were mandated to invest in specific priority sectors. The Life Insurance Corporation of India (LIC), for example, was required to invest 25 per cent of its annual accretion of funds to social sectors, including water and sanitation. In addition, the high statutory liquidity ratio requirements for the banking sector also made funds available for priority purposes. The publicly-owned development financing institutions (DFI) largely benefited from this regime, although as a part of financial sector reform, the directed credit regime has now been withdrawn.

The Infrastructure Leasing and Financial Services Limited (IL&FS) is a private entity which has, since its establishment in 1987, floated special purpose vehicles (SPVs) and entered into concession agreements with state and local governments for building and operating, on a commercial basis, infrastructure projects. The Infrastructure Development Finance Company (IDFC) is also a private sector initiative for financing infrastructure projects which is expected to link public infrastructure projects and capital markets by enhancing credit, create partnerships between financing institutions, and subscribe to shares and debentures of infrastructure companies.

Commercial lending to India's urban infrastructure sector is a tiny proportion of total lending. The engagement of the banking institutions too is negligible, although banks have begun to participate in urban infrastructure projects through co-financing.

The contemporary financing arrangements including public sector funding have been noted to be deficient on several counts–

❶ Absence of rigorous project preparation and appraisal processes. At the borrower's end, this has led to a situation of inappropriate incentives and the resultant inefficient utilization of funds, and widespread service inefficiencies. There is a lack of project development and management capacity at the local level. It is common for inter-governmental loans not to be serviced properly. Loan delinquencies are often adjusted against state government transfers or through rescheduling of state loans, or even writing them off. This has meant a lack of transparency, and led to indifference on the part of local authorities to financial viability issues, and inadequate attention to effective tariff structures and cost recovery;

❷ Inability of municipalities to contribute to project resources. Few municipalities are reported to have operating revenue surpluses. This position has not changed even with the implementation of the recommendations of the state finance commissions (SFCs) which, in several instances, have suggested rationalization of the system of devolution of resources to local bodies and introduction of user charges on a full cost recovery basis along with indexation; and

❸ Lack of control over investment decisions by municipal entities, even when they are saddled with both the problems of debt servicing and operation and maintenance of urban facilities. This is especially the case for the smaller municipal entities where investment decisions are taken by the higher governmental tiers or the state level utility boards.

In the context of these financing arrangements, the flow of resources for urban infrastructure has been far too small relative to the needs. During the Ninth Plan period (1997-2002), estimates of resource flows to the sector ranged from Rs.22.0-25.0 billion per annum, with an estimated share of the institutional finance in the range of 30 to 35 per cent. The Ninth Plan provision for urban water was Rs.117billion which significantly fell short of what was needed to clear the backlog and to provide for incremental urban population. Even the limited funds provided under the Plan have not been utilized. This indicates at other constraints within thesystem which limit the absorption capacity as well as suggests a low level of priority accorded to this sector's spending. The institutional capacity has not only constrained absorption of funds, but also resulted in poor use of funds with inappropriate investment and inadequate planning and project management. Compared to the resource flows into the sector estimates of investments needed to upgrade urban infrastructure, the urban water and especially sewerage services in the coming years are very large (Table 1.3).

Table 3
Plan Outlays on Urban Water Supply and Sanitation
(current prices in Rs.billion)

Plan period	Total plan outlay	Urban water supply and sanitation	% of total outlay
(1)	(2)	(3)	(4)
First Plan (1951-56)	33.59	0.43	1.28
Second Plan (1956-61)	67.69	0.44	0.65
Third Plan (1961-66)	85.93	0.89	1.04
Fourth Plan (1969-74)	159.32	2.82	1.77
Fifth Plan (1974-79)	392.46	5.49	1.40
Sixth Plan (1980-85)	976.07	17.67	1.81
Seventh Plan (1985-90)	1797.42	29.66	1.65
Eighth Plan (1992-97)	4334.84	59.82	1.38
Ninth Plan (1997-01)	7800.00	117.00	1.50

Flow of resources for urban infrastructure has been for too small relative to the needs.

Estimates of investment requirements clearly suggest that they are far in excess of the likely resource flows to the sector through traditional routes. Even after accounting for a trend-based increase in institutional finance, there will be significant shortfalls in relation to even the lower estimate of investment requirements. The shortfalls have also to be seen in the context of the deteriorating finances of state governments. All state governments are running high fiscal deficits and have consequently set containment of fiscal deficit as a priority objective. In 2002/2003, the fiscal deficit of states was 4.8 per cent of their combined gross domestic product. An alternative route that many of the local government entities followed in the past, i.e., of borrowing from the financing institutions is also constrained by the rising contingent liabilities. As of 31 March, 2001, the state governments had an accumulated contingent liabilities of Rs.52.5 billion on behalf of municipalities. Fiscal adjustments and other pressures will impel the state governments to try and reduce deficits and reduce subsidies and grants for financing of infrastructure projects, and encourage municipal governments to rely upon their our resource raising efforts.

Table 4
Projected Gross Investment in Urban Infrastructure
(Rs.billion)

Year	Estimate (1)		Estimate (2)	
	Amount	As % of GDP	Amount	As % of GDP
(1)	(2)	(3)	(4)	(5)
1995/96	75.0	0.7	68.5	0.6
1996/97	92.4	0.8	85.4	0.7
1997/98	113.8	0.9	100.5	0.8
1998/99	140.1	1.1	120.6	0.9
1999/00	172.6	1.2	153.3	1.1
2000/01	212.5	1.4	189.2	1.2
2001/02	261.7	1.6	226.2	1.4
2002/03	322.3	1.8	275.5	1.5
2003/04	397.0	2.0	331.6	1.7
2004/05	488.9	2.3	402.4	1.9
2005/06	602.2	2.6	475.8	2.1

Source: The India Infrastructure Report, Tables 2.15 and 2.16.

It is in this context that this study entitled, **Financing Municipal Services: Reaching Out to Capital Markets** has looked at the potential of the growing capital market in the country for financing urban infrastructure and services. Since 1997, faced with the limits of government and development bank financing of urban services, several municipal governments have raised funds directly form the market by using credit enhancement mechanisms, like escrowing a part of their revenue streams for redemption of loans. Access to capital market has meant fulfillment by municipal corporations of several conditions. This study takes note of such conditions and provides a framework for municipalities to assess their resource raising capacity – creditworthiness as it is referred to, for tapping the expanding capital market for financing urban infrastructural services.

This study begins with a brief account of the existing legal framework for municipal borrowing (Section 2), and follows it up in Section 3 with an analysis of the finances and functioning of four municipal corporations, namely, Agra, Allahabad, Bangalore, and Vadodara, with a view to indentifying the key differences between those corporations that are able to reach out to the capital markets and those that continue or prefer to rely on state government grants for financing their activities. The methodology used here consists of developing in the first instance, indicators for assessing and evaluating the finances of municipal governments and later, looking at other supplementary initiatives that contribute to their functioning. This methodology serves two purposes: (i) assesses the creditworthiness which is central to the capacity of municipalities to be able to repay debts, and (ii) demonstrates that debt financing of municipal services and infrastructure is also a function of variables other than those that indicate the creditworthiness of municipalities. The measures that are used for assessing the creditworthiness relate to (i) internal revenue generation, (ii) spread and depth of tax base, (iii) external financing of revenue and capital expenditure of municipal governments, (iv) debt servicing capacities, and (v) capital expansion.

Section 4 reviews the recent initiatives with capital market financing of municipal infrastructure, with particular reference to credit rating exercises and methodology. The final Section provides a framework for municipalities to assess their performance which constitutes the first step forward in order to tapping the capital market for financing urban infrastructural services. Basic concepts that are implicit in capital market financing are also discussed in the final section.

2 LEGAL FRAMEWORK FOR MUNICIPAL BORROWING

Municipal government borrowing in India[9] is regulated by the Local Authorities Loans Act, 1914. This Act specifies the (i) purposes for which local bodies may contract a loan, (ii) limits on the amount of loan, (iii) duration of loans, (iv) security or collateral, and (v) repayment procedures. Subject to the limits imposed by this Act, the state government have the flexibility to determine the framework within which local governments – a term used to comprise all forms of local bodies including the parastatals, can borrow from the market. The framework which is laid out in the state-level municipal laws contains rules in respect of (i) the nature of the funds on the security of which money may be borrowed; (ii) the works for which money may be borrowed; (iii) the manner of making applications for permission to borrow money; (iv) the manner of raising loans, (v) the sum to be charged against the funds which are to form the security for the loan; (vi) the attachment of such funds and the manner of disposing them; and (vi) the accounts to be kept in respect of loans.

Most countries that permit local borrowing have established debt limits intended to keep local authorities from borrowing irresponsibly. Many prohibit local authorities from borrowing in foreign currencies. Some require central government approval of all sub-national debt. A few countries forbid local borrowing altogether.

The four municipal corporations namely, Agra, Allahabad, Bangalore and Vadodara which form a part of this study and which are governed by the Uttar Pradesh Municipal Corporation Act, 1959 (as amended by the UP Act No.12 of 1994), the Karnataka Municipal

[9] State government borrowing is regulated by Article 293 (3) of the Constitution. All state government borrowings are subject to approval by the Government of India, who is empowered to impose such conditions as considered necessary in this respect.

Corporation Act, 1976, and the Bombay Provincial Municipal Corporation Act, 1949 (as amended upto 1994) respectively contain provisions in respect of—

- powers of a municipal corporation to borrow;
- time for repayment of money borrowed;
- limits of borrowing powers;
- maintenance and investment of sinking funds; and
- attachment of corporation fund in case of default of repayment of loan.[10]

Gujarat

The Gujarat Municipalities Act, 1963 does not contain any provision on borrowing by municipal bodies. The Bombay Provincial Municipal Corporation Act, 1949, which is applicable to the municipal corporations of Gujarat contains several sections that prescribe the conditions within which the municipal corporations in the state may borrow.

Power of the corporation to borrow: According to Section 109, a corporation may borrow by way of debenture or otherwise any sums of money which may be required. This loan may be taken on the security of any immovable property vested in it or proposed to be acquired by it or of all or any of the taxes, rates, cesses, fees and charges authorized by or under this act. The money can be borrowed only for the following purposes:

- for defraying any costs, charges or expenses incurred by it;
- for discharging any loan or debt to be repaid by the corporation;

[10] There are no statutes in the country that contemplate insolvency of local bodies, let alone lay down insolvency procedures.

- generally for carrying out the purposes of this act including the advance of loans authorized thereunder.

The loans can be raised provided that they are with the previous sanction of the government, and the amount, rate of interest and terms of the loan have been approved by the government. In case loans are raised for undertaking works, they should be raised only for execution of permanent works if the cost is spread over a term of years. The period for which the loans may be raised should not exceed 60 years.

Section 110 authorizes the municipal corporations to borrow from any bank or banks in which surplus money at the credit of the municipal fund or the transport fund are deposited, against public securities in which the cash balance of the corporation may be invested. The corporation may also take credit from banks of amounts fixed by the state government from time to time on the security of taxes the corporation is authorized to collect.

Repayment of loans: Every loan raised is to repaid through—

- payment from a sinking fund;

- equal payment of principal and interest;

- by equal payment of principal;

- in the case of a loan borrowed before the appointed day by annual drawings if such method was in operation before such day;

- from any sum borrowed for the purpose; and

- partly from sinking fund and partly from money borrowed for the purpose.

Sinking funds: The corporation is required to create a sinking fund if sanctioned for repayment of loans borrowed on the debentures and is to pay into such sinking funds, sufficient sums to pay off the loan by the given date. Sinking funds are to be invested in public securities. All interest and dividend received from this are to be paid back into the sinking fund. The sinking fund can be applied for no other purpose than the repayment of the loan for which it was created, until such a loan is wholly discharged. Money in two or more such funds may be consolidated into a common fund.

All sinking funds are to be examined annually with respect to the regularity of investments and value of cash accounts held in the funds. If any amount is found deficient in the fund, then the corporation is expected to pay the same amount into the fund. In case of excess amount, the amount may be transferred to the corporation fund.

Section 116 contains provisions regarding loans raised before the appointed day. Section 117 states that the state government may attach a municipal fund or the transport fund if a corporation defaults in repayment of loans taken from the government. Sections 118-125 deal with the form and effect of debentures, provisions regarding joint ownership of debentures, issue of duplicate securities, renewal of debentures, and indemnity and discharge in certain cases. The right to sue in respect of moneys secured by way of debentures vests with the holders.

Annual statement: Section 126 states that the Commissioner must prepare and submit an annual statement containing the following details:

- particulars of loans borrowed in previous years which have not been repaid fully;
- particulars of loans borrowed in the current year;
- in case of every loan for which a sinking fund is maintained the amount of accumulation in the sinking fund at the close of the year;
- particulars of loans repaid in the year; and
- particulars of securities in which the sinking funds have been invested.

The statement must be laid before a meeting of the corporation, and a copy must be sent to the state government and to the Accountant General.

No amendments have been made in provisions on borrowing consequent upon the enactment of the Constitution (seventy-fourth) Amendment Act, 1992.

Karnataka

Borrowing by local governments in Karnataka is regulated by the provisions of Section 86 of the Karnataka Municipal Act, 1964 under which municipal councils may borrow either from the government or from any Bank, Corporation or person, any sum of money required for the construction of any work of permanent nature. The loan can be taken only when it is previously sanctioned by the state government.

Borrowing provisions by municipal corporations of the state are laid down in Sections 154-165 of the Karnataka Municipal Corporation Act, 1976.

Power of the corporation to borrow: Section 154 authorizes a municipal corporation to borrow by way of debenture or otherwise any sums of money which may be required. This loan may be taken on the security of the taxes, duties, fees and dues authorized by or under this act. The money can be borrowed only for the following purposes—

- for construction of works;
- for acquisition of lands and buildings;
- to pay off any debt due to the government; and
- to repay a loan previously raised.

The loans may be raised provided that they are with the previous sanction of the government, and the amount, rate of interest and terms of the loan have been approved by the government. No portion of the loan may be used for any other purpose except for which it has been acquired.

The period within which the loanis required to be repaid should not be more than 60 years. The time for repayment of any money borrowed for discharging any previous loan is not, except with the express sanction of government, to extend beyond the unexpired portion of the period for which such previous loan was sanctioned.

Limit to borrowing powers: The corporation can not borrow beyond a limit fixed by or under this act, which is equal to 10% of the annual rateable value of land and buildings with the corporation.

Sections 157-159 deal with the form and effect of debentures and provisions regarding joint ownership of debentures.

Sinking funds: In accordance with the provisions of Section 160, the corporation is to maintain sinking funds for repayment of money borrowed and debentures issued. The corporation is expected to pay by quarterly installments into such sinking funds, sufficient sums for the repayment of borrowed funds within the period fixed for the loan. Sinking funds are to be invested in public securities, government guaranteed securities and debentures of the corporation. Money in two or more sinking funds may be consolidated into a common fund. The sinking fund shall be applied for no purpose other than the repayment of the loan for which it was created, until such a loan is wholly discharged.

The trustees of the fund shall submit an annual report at the end of every year containing the following information:

- the amount which has been invested during the year in the fund;
- the date of last investment made previous to the submission of the statement;
- the aggregate amount of securities held by them in their hand; and

- the aggregate amount which has up to date been applied for discharging the loans.

Every such statement shall be laid before the council and published.

The municipal corporation has the power to consolidate all loans into a single loan and invite the holders of municipal debentures to exchange their debentures for Scripps of such a loan. The period for extinction of such a loan is not to exceed the farthest date for repayment of any of the loans so consolidated.

Payment of interest and repayment of loans is the first charge over all other payments due from the corporation. The government has the right to attach the corporation fund if the corporation fails to repay any loan taken from the government in time. An official appointed by the government will then operate the fund.

No changes have been made to these provisions consequent upon the Constitution (seventy-fourth) Amendment Act, 1992.

Uttar Pradesh

Section 114A of the Uttar Pradesh Municipalities Act, 1916, lays down the framework for borrowing by municipalities. It states that 'for the performance of duties and functions, whether mandatory or discretionary, municipalities may, with the previous sanction of the state government and subject to rules prescribed in this behalf, raise loans in the open market or from any financial institution by issue of debentures or against any other security'. The Uttar Pradesh Municipal Corporation Act, 1959, contains a chapter on borrowing (chapter VIII, sections 154-171) that define the borrowing powers of the corporations in the state.

Power of the corporation to borrow: According to Section 154, a corporation may borrow by way of debenture or otherwise any sums of money which may be required. This loan may be taken on the security of any immovable property vested in it or proposed to be acquired by it or of all or any of the taxes, rates,cesses, fees and charges authorized by or under this act. The money may be borrowed only for the following purposes—

- for defraying any costs, charges or expenses incurred by it;
- for discharging any loan or debt to be repaid by the corporation; and
- generally for carrying out the purposes of this act including the advance of loans authorized thereunder.

The loans can be raised provided that they are with the previous sanction of the government, and the amount, rate of interest and terms of the loan have been approved by the government. In case of works, they should be raised only for execution of any permanent work if its cost is spread over a term of years. The period for which the loans can be raised should not exceed 30 years. The money raised through such loans should be applied only for the purpose for which it has been raised.

Section 155 authorizes the corporations to borrow from any bank or banks in which the surplus moneys at the credit of the corporation are deposited, against public securities in which the cash balance of the corporation may be invested.

Repayment of loans: Sections 156-60 deal with the repayment of loans and the provision for sinking funds. Every loan raised can be repaid through—

- payment from a sinking fund;
- equal payment of principal and interest;
- from any sum borrowed for the purpose;
- partly from sinking fund and partly from money borrowed for the purpose; and
- by other such methods including drawings as the state government may specify.

Sinking funds: The corporation shall create a sinking fund if sanctioned for repayment of loans borrowed on the debentures issued and shall pay into such sinking funds, sufficient sums to pay off the loan by the given date. Sinking funds shall be invested in public securities, government guaranteed securities and debentures of the corporation. All interest and dividend received from this shall be paid back into the sinking fund. The sinking fund shall be applied for purpose other than the repayment of the loan for which it was created, until such a loan is wholly discharged. Money in two or more such funds may be consolidated into a common fund. All sinking funds are required to be examined annually by the Examiner, Local Fund Accounts who shall ascertain the regularity of investments and value of cash accounts held in it. If any amount is found deficient in the fund, then the corporation should pay the same amount into the fund. In case of excess amount, the amount may be transferred to the corporation fund.

Sections162-169 deal with the form and effect of debentures, provisions regarding joint ownership of debentures, issue of duplicate securities and renewal of debentures. The right to sue in respect of the moneys secured by the debentures vests with the holder.

Annual statement: Section170 states that the Mukhya Nagar Adhikari must prepare and submit an annual statement containing the following details—

- particulars of loans borrowed in the previous years which have not been repaid fully;
- particulars of loans borrowed in the current year;
- in case of every loan for which a sinking fund is maintained the amount of accumulation in the sinking fund at the close of the year;
- particulars of loans repaid in the year; and
- particulars of securities in which the sinking funds have been invested.

The state government may make rules for the procedure for obtaining sanction of the state government for loans, establishment, investment and annual examination of the sinking fund, manner of attachment of corporation fund and printing of debentures. No amendments have been made in the provisions on borrowing consequent upon the Constitution (seventy-fourth) Amendment Act, 1992.

Inter-state differences in provisions regulating the process of local governments to borrow are, at best, minor, and relate to the limits on borrowing, e.g., percentage of the annual rateable value of land and buildings or the period for which a loan may be contracted. Important to note, however, are provisions in respect of (ii) sinking funds and investment of sinking funds into public securities and government guaranteed securities, and (ii) preparation and submission of an annual statement giving details on loans contracted and how sinking funds are being maintained.[11]

[11] In addition to the Local Authorities Loan Act,1914 which regulates local government borrowing, there are several other relevant statutes. These are (i) Public Debt Act, 1944 which empowers the Reserve Bank of India (RBI) to regulate the primary issuance for debt securities by the central and state governments, (ii) the Companies Act, 1956 which sets out the code of conduct for the corporate sector in relation to the issue, allotment, and transfer of securities, and (iii) Securities and Exchange Board of India (SEBI) which regulates primary issuance in capital and debt markets, other than government securities, and ensures sound trading practices in the secondary market through stock exchanges.

3 WHAT MAKES SOME MUNICIPALITIES TO GAIN ACCESS TO CAPITAL MARKETS AND OTHERS TO FAIL: ANALYSIS OF THE FINANCES OF FOUR MUNICIPAL CORPORATIONS

AGRA MUNICIPAL CORPORATION (AGMC)

The Agra Municipal Corporation (AGMC) is governed by the provisions of the Uttar Pradesh Municipal Corporation Act, 1959 (as amended by UP Act 12 of 1994). This Act specifies the duties and powers of all municipal corporations in Uttar Pradesh which stand divided into obligatory duties and discretionary duties. Obligatory duties of Agra Municipal Corporation (AGMC) comprise such duties as scavenging of public streets, collection of waste and sewage, construction and maintenance of drains, management and maintenance of waterworks necessary for water supply, street lighting and the like, regulation and maintenance of specified activities and services, and such other activities as naming and numbering of streets and premises. In addition, the municipal corporation has a large number of discretionary duties which include holding of exhibitions, promoting arts and cultural events, construction of bathing ghats, encouraging trade and industry, and the like.

Also defined in the Uttar Pradesh Municipal Corporation Act, 1959 are the tax powers of the municipal corporations in the state. These powers include powers to levy taxes on land and buildings, taxes on non-motorized vehicles, boats and animals, betterment levies, tax on deeds of transfer of immovable property, and a tax on advertisements. There are no statutory provisions in the Act for grants-in-aid or sharing of tax receipts, but the state government provides grants and dispensation on several accounts for meeting the revenue account expenditure of municipal corporations. The Agra Municipal Corporation (AGMC) and other municipal corporations receive capital grants for creating new assets and contracts loans from financing and non-banking institutions.

Table 5
Finances of the Agra Municipal Corporation (AGMC)

Finances (Rs. lakh)	Years				
	1995/96	1996/97	1997/98	1998/99	1999/00
(1)	(2)	(3)	(4)	(5)	(6)
Tax revenues	284.22	221.57	295.1	283.6	331.99
Non-tax revenue	165.88	83.13	373.4	575.1	441.6
Grants	1483.3	1637.5	1860.5	2367.5	2366.7
Total revenues	1933.4	1942.2	2529.0	3226.2	3140.3
Revenue account expenditure	1788.9	1873.8	2382.9	2439.9	3263.1
Capital expenditure	134.4	433.5	904.2	981.6	1006.1
Total expenditure	1923.3	2307.3	3287.1	3421.5	4269.2

The financial performance of Agra Municipal Corporation (AGMC) given in Tables 3.3 and 3.4, shows that the corporation is heavily dependent on state government for meeting its obligations. Thus—

❶ grants constitute 74 to 85 per cent of the corporation's revenue receipts. Own revenues of the corporation are distressingly low, which have ranged between 15 to 25 per cent of the total revenues over the five year period.

❷ although the Agra Municipal Corporation (AGMC) has posted a surplus on revenue account, the surplus is grant-generated; the fact that the Agra Municipal Corporation (AGMC) is unable to spend the grant component on the maintenance of services even when the overall expenditure levels are low, and maintenance of services so poor, speaks of the low level of capacity of the corporation.

❸ the only redeeming feature of the corporation is the capital expenditure component which has shown a consistently rising trend, and may show an increasing sensitivity to creating new infrastructural assets.

Table 6
Measuring Performance: Agra Municipal Corporation (AGMC)

Indicators	Years				
	1995/96	1996/97	1997/98	1998/99	1999/00
(1)	(2)	(3)	(4)	(5)	(6)
Ratio of tax revenue to total revenues	0.146	0.116	0.116	0.088	0.106
Ratio of grants to total revenues	0.767	0.843	0.736	0.734	0.754
Revenue account surplus/deficit (Rs.lakh)	144.5	68.4	146.1	786.3	-122.8
Surplus/deficit as a % revenue receipts	7.5	3.5	5.8	24.4	-24.3
Capital expansion (Rs. lakh)	134.4	433.4	904.2	981.5	1006.1

Given its finances, the Agra Municipal Corporation (AGMC) can not be considered a solvent entity. It is dependent on the state government for performing its functions, and is unprepared to access the capital market for funds. The sources of its revenue are stagnant. Figures suggest that it is a grant financed corporation. Moreover, revenue grants are far in excess of capital grants, and are unsystematically released.

ALLAHABAD MUNICIPAL CORPORATION (AMC)

The Allahabad Municipal Corporation (AMC) is governed by the provisions of the Uttar Pradesh Municipal Corporation Act, 1959 (as amended by UP Act 12 of 1994). The UP Municipal Corporation Act lays down the duties and powers of the municipal corporations in Uttar Pradesh, which are divided into obligatory duties and discretionary duties. There are forty-six obligatory duties comprising duties that are related to service provision (collection of sewage, scavenging of public streets, construction and maintenance of drains, management and maintenance of waterworks necessary for water supply, street lighting, and the like), regulation and maintenance of specified activities and services, and such activities as erection of boundary marks defining the limits of the city and naming and numbering of streets and premises. In addition, there are 44 discretionary duties.[12]

[12] Examples of discretionary duties are provision of milk to the expectant mothers, encouraging music and fine arts, holding of exhibitions, grant of loans for building purposes, construction and maintenance of bathing ghats, presentation of civic addresses, taking measures to promote trade and industry, and establishing a bank and the like.

The Uttar Pradesh Municipal Corporation Act, 1959 also defines the tax powers of the municipal corporations. These comprise – similar to that of the Agra Municipal Corporation (AGMC) - property tax, tax on vehicles, boats and animals, betterment tax, tax on deeds of transfer of immovable property, and tax on advertisements. It also specifies the procedures for the levy of a tax including fixing of the tax rate. These taxes and levies generate revenues for the Allahabad Municipal Corporation (AMC) and are spent on implementing the duties as specified under the Act. Although, the Act does not provide for any transfer of resources to municipal corporations, the Government of Uttar Pradesh provides grants and such other dispensations as are called for to enable municipal corporations carry out their statutory duties and functions.

The finances of the Allahabad Municipal Corporation are shown in Table 7 below.

Table 7
Finances of the Allahabad Municipal Corporation (AMC)

Year	Income (Rs.lakh)			Expenditure (Rs.lakh		
	Revenue	Capital	Total	Revenue	Capital	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1995/96	944.1	75.5	1019.6	2016.2	25.5	2041.7
1996/97	948.2	25.9	974.1	2278.9	7.9	2286.8
1997/98	1480.7	80.6	1561.3	2740.4	88.9	2829.4
1998/99	2699.2	112.0	2811.2	2515.6	20.5	2536.1
1999/00	2732.3	110.8	2843.1	2960.1	37.0	2997.1

Further details of the finances of Allahabad Municipal Corporation (AMC) show that with the exception of one year i.e., 1998/99, the corporation has consistently faced a deficit, both on the revenue account as also on the overall expenditure. As a proportion of total income, deficits have, however, declined significantly over the 1995/96 and 1999/00 period, explained largely by an escalation in grants from the state government. Measuring the performance on the basis of the indicators, referred to earlier, shows that—

❶ tax and non-tax revenues constitute a small proportion of the total revenue account receipts of the Allahabad Municipal Corporation (AMC). Not only has there been no improvement in the size and structure of the revenue base of the corporation, the ratio of tax to total revenue receipts as well as the ratio of non-tax to total revenues have registered a drop in 1998/99 and 1999/00 compared to those observed in 1995/96.

❷ the Allahabad Municipal Corporation (AMC) earns no revenues from rents and interests with only an insignificant amount being earned from other non-tax sources of revenues.

❸ grants from the state government are the mainstay of the Allahabad Municipal Corporation (AMC). In 1995/96, grants formed 59 per cent of the total revenues which rose to 79 per cent in 1998/99 and 77 per cent in 1999/00. High dependence on state finances for meeting the recurrent expenditures, in other words, for discharging the obligatory duties specified in the Act, is a major characteristic of the finances of the Allahabad Municipal Corporation (AMC).

❹ capital expenditure meant to create new stocks of infrastructure and services forms a small proportion of the total expenditure of the Allahabad Municipal Corporation (AMC). In 1999/00, it formed just a little over 1 per cent of the total expenditure, indicating that the process of creating new infrastructural assets either rests with other agencies or has been tardy in Allahabad. The following table provides the data on indicators.

Table 8
Measuring Performance: Allahabad Municipal Corporation (AMC)

Indicators	**Years**				
	1995/96	**1996/97**	**1997/98**	**1998/99**	**1999/00**
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Revenue account surplus/deficit (Rs.lakh)	-1072.1	-1334.8	-1259.8	+183.6	-227.7
Revenue surplus/deficit as a % revenue receipts	(-)113.6	(-)140.7	(-)85.1	(+)6.8	(-)8.3
Ratio of tax to revenue receipts	0.18	0.20	0.20	0.12	0.15
Ratio of grants to revenue receipts	0.59	0.59	0.56	0.79	0.77
Ratio of own revenues to total revenues	0.41	0.41	0.44	0.21	0.23
Capital expansion (Rs.lakh)	25.51	7.94	88.96	20.46	37.00

The Allahabad Municipal Corporation (AMC) is in a state of deprivation and distress on account of a reduction in grant finance and abolition of octroi, and the consequential inability to cope with the pressures of adequately meeting the load of civic functions. The primary concern of the corporation is to manage the salary component of expenditure. As a part of the initiative taken to computerize the Accounts Department, the AMC has been able to partly control receipts and expenditure and monitor payment of salaries and pensions. The overall picture, however, is one of grant-financed, **laid back** municipal corporation which is starved of funds.

BANGALORE MUNICIPAL CORPORATION (BMC)

The Bangalore Municipal Corporation (BMC) is governed by the provisions of the Karnataka Municipal Corporations Act, 1976 which lays down, inter-alia, the powers and functions of municipal corporations, and enumerates the taxes that they could levy. The powers and functions of the corporation are divided into two parts: (i) obligatory which include water and cleansing of public streets and public places; collection, removal, treatment and disposal of sewage; construction, maintenance and cleaning of drains; street lighting; regulation of offensive trades; construction of public markets; laying out new streets and the like. There are 31 such obligatory functions within the fold of the municipal corporations in Karnataka. These are supplemented by 23 discretionary functions. Chapter X of the Act lists out the taxes that the municipal corporations in the state are empowered to levy; these include among others, a tax on buildings or land or both, a toll on vehicles other than motor vehicles, a tax on advertisement, a duty on transfers of property in the shape of an additional stamp duty, and a water rate for water supplied by the corporations. Levy of taxes as also the fixation of rates require the sanction of the Government.

The finances of the Bangalore Municipal Corporation (BMC) which serves an area of about 225 sq.kms. and a population in excess of 4.5 million are shown in Table 9. The table brings out several important features—

Table 9
Finances of the Bangalore Municipal Corporation (BMC)

Finances (Rs. lakh)	**Years (Rs.lakh)**				
	1995/96	**1996/97**	**1997/98**	**1998/99**	**1999/00**
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Revenue Receipts					
Tax income	6441.5	8399.0	9358.3	10557.9	13524.9
Non-tax income	2484.0	3069.6	6927.3	8111.6	7909.7
Grants	5865.1	5803.0	7127.7	7567.3	6605.8
Total	14790.6	17271.6	23413.3	26236.8	28040.4
Capital Receipts	453.6	4725.2	36979.9	9163.4	17877.9
Total receipts	15244.2	21996.8	60393.2	35400.2	45918.3
Revenue Expenditure					
Interest payments	354.4	593.5	599.8	2523.6	1814.4
Others	12481.6	13276.6	20255.9	26674.1	24958.4
Total	12836.5	13870.1	20825.7	23197.6	26772.8
Capital Expenditure					
Loan repayment	156.6	199.8	699.3	211.0	54.6
Others	738.5	1418.0	3633.2	4661.1	13261.5
Total	895.1	1617.8	4332.5	4872.1	13316.1
Total expenditure	13731.6	15487.9	25158.2	28069.7	40089.0

❶ Own revenues of the Bangalore Municipal Corporation (BMC) account for over 75 per cent of the total revenues. Moreover, the proportion of own revenues has consistently risen over thefive year period, indicating a better and fuller use of the potential of own tax revenues by theBangalore Municipal Corporation (BMC).

❷ Within the own revenue component, improved performance is observed in non-tax revenues whose share in total revenues has jumped from 17 per cent in 1995/96 to about 29 per cent in 1999/00.

❸ Unlike in the case of Agra Municipal Corporation (AGMC) and Allahabad Municipal Corporations (AMC), theBangalore Municipal Corporation (BMC) has made use of debt funds for financing its activities. Capital expenditure (excluding) loan repayment has risen from Rs.738 lakh in 1995/96 to Rs.13261.5 lakh in 1990/00. Debt servicing (loan and interest repayment) ranges from approximately 3.4 per cent in 1995/96 to about 6.7 per cent in 1999/00. In 1998/99, it accounted for 10.4 per cent of the total revenues. Debt servicing is as yet a small component of the corporation's expenditure.

❹ Capital expansion in spheres where the Bangalore Municipal Corporation (BMC) operates has been occurring over the five year period. From a relatively small component of total expenditure in 1995/96 (5.3%), capital expenditure rose to nearly 33 per cent of the combined revenue and capital expenditure.

The performance measurement indices of Bangalore Municipal Corporation (BMC) are shown in Table 10.

Table 10
Measuring Performance: Bangalore Municipal Corporation (BMC)

Indicators	**Years**				
	1995/96	**1996/97**	**1997/98**	**1998/99**	**1999/00**
(1)	(2)	(3)	(4)	(5)	(6)
Ratio of tax revenue to total revenues	0.44	0.49	0.40	0.40	0.48
Ratio of non-tax component to total revenues	0.17	0.18	0.30	0.31	0.29
Ratio of grants to total revenues	0.39	0.33	0.30	0.29	0.24
Ratio of debt servicing to total revenues	0.034	0.034	0.025	0.096	0.064
Ratio of debt servicing to total expenditure	0.039	0.042	0.028	0.108	0.067
Ration of capital expansion to total expenditure	0.82	0.87	0.83	0.95	0.99

Three features of the functioning of the Bangalore Municipal Corporation (BMC) which impact on its performance are worth noting. First: the preparation and maintenance of financial records, and maintenance of other forms, issuance of licenses etc., are conducted by electronic means as specified by the office of the Municipal Commissioner. Second: the Bangalore Municipal Corporation (BMC) operates through a consolidated fund of the corporation which consists of all taxes, tolls and other imposts, fines, fees, penalties, proceeds of land and property transactions, interests, profits, gifts and transfers. Transactions relating to the consolidated fund are classified into three main funds, namely: (a) government-type fund which records transactions relating to all taxes, tolls, impositions, fines, fees, penalties, and public assets such as roads and bridges, (b) propriety-type fund which registers commercial transactions, maintenance of assets by levy of user charges, maintenance of markets, levy of market fees, creation and construction of enterprises, and collection of rents and profits, and (c) fiduciary-type fund which record transactions relating to trusts, gifts, transfers, including projects funds and pension funds. Besides, there are three sub-funds, viz., general fund, capital project fund, and special revenue fund.

A third feature of the functioning of the Bangalore Municipal Corporation (BMC) relates to performance budgeting, which is a tool to set achievable annual targets, to provide funds, and to monitor implementation. As a result of its adoption, the budget of the corporation now consists of (i) a statement of goals and objectives of departments or projects, (ii) a quantitative estimate of the work to be accomplished, and (iii) expected efficiency. Prior to the reforms of accounting and budgeting systems, the functioning of the Bangalore Municipal Corporation (BMC) suffered from archaic methods of documentation, absence of performance standards, and lack of accountability.

VADODARA MUNICIPAL CORPORATION (VMC)

The Vadodara Municipal Corporation (VMC) functions in accordance with the provisions of the Bombay Provincial Municipal Corporation Act, 1949. Unlike other Acts, the Bombay Provincial Municipal Corporations Act, 1949 addresses the issue of duties and functions under different chapters, i.e., chapters dealing with drains and drainage, water supply, streets, building regulations, improvement schemes, municipal fire brigade, sanitary provisions, markets and slaughter houses, transport undertaking, vital statistics, and licenses and permits. The specific duties of municipal corporations in the state, governed by this Act, are detailed out in the relevant chapters. On the other hand, taxes to be imposed under the Act are specified under the general head "Municipal Taxation", and include property taxes, special provisions relating to water and conservancy taxes, and taxes on vehicles, boats and animals. The Act also provides detailed explanations relating to the levy of taxes, their assessment, and collection procedures.

The Vadodara Municipal Corporation (VMC)'s activities are spread out to 108 sq.kms., and relate to over 1.3 million population of which about 20 per cent live in slums. The Vadodara Municipal Corporation (VMC) runs schools and hospitals and health centres; it also provides water supply and sewerage system.

Table 11
Finances of the Vadodara Municipal Corporation (VMC)

Finances (Rs.lakh)	Years				
	1995/96	1996/97	1997/98	1998/99	1999/00
(1)	(2)	(3)	(4)	(5)	(6)
Revenue Income					
Tax income	9,328.9	12,343.6	11,790.4	13,173.4	14,712.5
Charges, fees and fines, rents and interest	20.4	12.4	10.7	11.9	21.4
Non-tax income	470.8	544.0	803.6	1,338.6	1,081.3
Grants	1,490.0	1,564.4	2,169.4	2,523.8	3,440.4
Miscellaneous	301.6	272.0	553.9	659.6	558.2
Total revenue income	11,611.8	14,736.5	15,327.9	17,707.2	19,793.8
Capital Receipts					
Capital income	269.5	417.8	1087.0	1,899.5	2,982.1
Loan income	-	106.9	106.4	428.6	2,429.2
Total income and receipts	11,881.3	15,154.3	16,414.9	19,606.7	22,775.9
Revenue Expenditure (including of interest repayment)					
Revenue expenditure	10,147.5	10,976.5	11,950.5	15,906.1	18,596.0
Capital expenditure (including of debt services)	640.9	1,135.1	1,372.6	2,902.5	5,782.8
Total revenue and capital expenditure	10,788.4	12,111.6	13,323.1	18,808.6	24,378.8

The finances of the Vadodara Municipal Corporation (VMC) are provided in Tables 11 and 12. According to Table 11, the total revenue income of Vadodara Municipal Corporation (VMC) was placed at Rs.19,793 lakh in 1999/00, having risen from Rs.11,611 lakh in 1995/96, registering an average annual growth of over 13 per cent. The revenue account expenditure of Vadodara Municipal Corporation (VMC) was Rs.18,595 lakh in 1999/00, posting a revenue account surplus of Rs.1,197.8 lakh. The Vadodara Municipal Corporation (VMC) has maintained a surplus in all the five years under reference. Important features of VMC's finances are as follows—

❶ Tax sources are an extremely important source of revenue for the Vadodara Municipal Corporation (VMC), although in terms of percentage, the importance of taxes has begun to decline. In 1995/96, tax revenues comprising octroi receipts and revenues from taxation of land and property accounted for 80 per cent of the total revenue receipts; it increased to 83 per cent in 1996/97 and began to register a decline. In 1999/00, its share, although significant, dropped to 74 per cent.

❷ The non-tax revenue component which comprises charges, fees, fines, rents and interest is not important in the revenue structure of the corporation, although it has been registering a growth rate which is in excess of the growth rate of the tax component of VMC's revenues. In 1999/00, the share of non-tax in total revenues was 8.3 per cent as compared to 6.8 per cent in 1995/96.

❸ The dependence of the Vadodara Municipal Corporation (VMC) on state government for meeting the recurrent expenditures has risen slowly over the period 1995/96 and 1999/00. In 1999/00, grants formed 17.4 per cent of the total revenues; the share of grants in 1995/96 was 12.8 per cent.

❹ The Vadodara Municipal Corporation (VMC) has consistently maintained a revenue account surplus, although its surplus has plummeted from a high of Rs.3378 lakh in 1997/98 to Rs.1197.8 lakh in 1999/00. As a proportion of total revenues, it is a major drop, from 22 per cent in 1997/98 and 25.5 per cent in 1996/97 to just about 6 per cent in 1999/00. Indeed, the finances of the Vadodara Municipal Corporation (VMC) in 1996/97 and 1997/98 were such that the internally-generated revenues could have met the revenue account expenditure; in 1999/00, own revenues are able to finance 85 per cent of the revenue account expenditure.

❺ An important feature of the finances of the Vadodara Municipal Corporation (VMC) is that its capital expenditure has risen at an extraordinarily high rate over the five year period. In 1999/00, the size of capital expansion was of the order of Rs.5,782.8 lakh which is 23.7 per cent of the combined capital and revenue expenditure of the VMC.

Table 12
Measuring Performance: Vadodara Municipal Corporation (VMC)

Indicators	Years				
	1995/96	1996/97	1997/98	1998/99	1999/00
(1)	(2)	(3)	(4)	(5)	(6)
Revenue account surplus (+)/deficit (-) as a % of revenue receipts	12.61	25.5	22.0	10.2	6.1
Ratio of tax to total revenue income	0.80	0.84	0.76	0.74	0.74
Ratio of charges, fees and fines to total revenue income	0.0017	0.0008	0.0007	0.0007	0.0011
Ratio of rents and interest to total revenue income	0.040	0.037	0.052	0.076	0.055
Ratio of grants to total revenue income	0.13	0.11	0.14	0.14	0.17
Ration of own revenue to total revenue income	0.87	0.89	0.86	0.86	0.83
Ratio of debt service payment to total revenue	0.20	0.15	0.14	0.10	0.10
Ratio of debt service payment to total expenditure	0.22	0.20	0.18	0.11	0.10

Like many corporations in India, the Vadodara Municipal Corporation (VMC) was characterized by excessive reliance on the past even when the past had lost its relevance, absence of a proper resource allocation mechanism, a weak link between resource realization and expenditure, difficulty in distinguishing revenue from capital expenditure, and absence of a long term perspective. The financial control system of the Vadodara Municipal Corporation (VMC) was fragile and inappropriate; for instance, there was a total absence of financial control. The classification and analysis of expenditure was inappropriate, and the bill movement system was defective.

In 1999, the Vadodara Municipal Corporation (VMC) undertook a series of reforms to improve its functioning. First, it divided the budget into five parts: (i) revenue budget, (ii) capital budget, (iii) loan budget, (iv) deposit/grant budget, and (v) advances budget. Second, it devised an in-built model of budget and resource allocation in the capital budget to ensure a balanced development of the city. Third, it evolved a participatory system of budget formulation. Four, it introduced (i) a centralized financial control system, (ii) a proper management of cash and working capital, and management of receivables, and (iii) a broad-based reform of tax and non-tax resources.

A number of observations are possible:

❶ the performance of Bangalore Municipal Corporation (BMC) and Vadodara Municipal Corporation (VMC) in respect of own revenues to total revenue receipts is far superior to that of the Agra Municipal Corporation (AGMC) and Allahabad Municipal Corporation (AMC). The following table gives the performance level on the basis of indicators.

Table 13
Ratio of Own Revenues to Total Revenue Receipts

Corporations	**Years**				
	1995/96	**1996/97**	**1997/98**	**1998/99**	**1999/00**
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Agra	0.209	0.151	0.224	0.252	0.242
Allahabad	0.407	0.407	0.438	0.214	0.233
Bangalore	0.603	0.664	0.696	0.711	0.764
Vadodara (1)	0.872	0.893	0.858	0.857	0.826
Vadodara (2)	0.652	0.744	0.692	0.714	0.659

1. Inclusive of octroi receipts.
2. Exclusive of octroi receipts.

❷ non-tax revenues as a proportion of total revenue receipts are **low** for all municipal corporations notwithstanding the fact that they are more elastic compared to property taxes. Bangalore's performance on this measure has consistently improved over the 5-year period. Low non-tax revenues typically suggest that there is reluctance on the part of municipal corporations to fix charges on the principle of cost recovery. Absence of the application of cost recovery principle is one of the most disconcerting features of the municipal finance system in the country.

Table 14
Financial Performance of Sampled Municipal Corporations

Indicators	**Bangalore**		**Vadodara**		**Allahabad**		**Agra**	
	1995/96	**1999/00**	**1995/96**	**1999/00**	**1995/96**	**1999/00**	**1995/96**	**1999/00**
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**
Tax revenue to total revenue receipts (%)	43.6	48.2	80.3	74.3	18.3	15.48	13.38	10.6
Own revenues to total revenue receipts (%)	60.4	67.4	87.2	82.6	40.7	23.3	20.9	24.2
Transfers to total revenue receipts (%)	39.6	23.6	12.8	17.4	59.3	76.7	79.1	75.8
Debt servicing to total revenue receipts (%)	3.45	6.47	19.7	9.8	-	-	-	-
Debt servicing to total revenue expenditure (%)	3.98	6.77	22.5	10.5	-	-	-	-
Debt servicing to revenue surplus/ deficit (%)	26.32	143.14	1.6	1.6	-	-	-	-
Capital expenditure to total expenditure (revenue and capital) (%)	5.40	33.08	5.94	23.7	12.49	1.2	4.1	23.6

❸ the improved financial performance of the Bangalore Municipal Corporation (BMC) and Vadodara Municipal Corporation (VMC) is observed in the proportion of expenditure financed out of state grants. These proportions are low for Bangalore and Vadodara, and extremely high for Agra and Allahabad; even when income and compensation for octroi is excluded from the financial indicators of Vadodara and Bangalore, grant financing of municipal expenditure is high. The following table gives a comparative position of the four sampled corporations.

Table 15
Ratio of Grants to Total Revenue Receipts

Corporations	**1995/96**	**1996/97**	**1997/98**	**1998/99**	**1999/00**
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Agra	0.791	0.849	0.776	0.748	0.758
Allahabad	0.590	0.590	0.560	0.770	0.770
Bangalore	0.396	0.336	0.304	0.288	0.235
Vadodara	0.128	0.106	0.141	0.142	0.174

❹ Agra Municipal Corporation (AGMC) and Allahabad Municipal Corporation rely on grant financing of city-based infrastructure. Evidently on account of a better credit performance, Vadodara and Bangalore Municipal Corporations have made use of institutional lending for financing infrastructural services. At the same time, debt financing as an instrument for financing urban infrastructure and services is still in an infant stage even with such municipal corporations as Bangalore and Vadodara.

4 MUNICIPAL BONDS IN INDIA

INTRODUCTION

A key development in the sphere of infrastructure financing in India has been the emergence of a municipal bond market. The bond market in India has grown significantly in recent years, in items of issuers and investors, instruments, trading volume, and market awareness. The central government 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.

The concept of municipal bonds as an instrument for raising resources for urban infrastructure projects which had been playing a crucial 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 elaborated by an Expert Group on the Commercialisation of Infrastructure Projects, known as the India Infrastructure Report. This Report noted: urban infrastructure services are provided by local level agencies. Funds have generally been in the form of loans and grants from the central and state governments. The ULBs own resources have been insufficient even to meet the operation and maintenance requirements of these services. Since most urban infrastructure services have been treated as public services and the concept of cost recovery has never been considered relevant, a commercial approach to these services has not developed. Even if the facilities were funded by loans, the repayment of loans were generally book adjustments or paid out of grants made by state governments. Even when user charges are levied, the price per unit is too low to cover even the variable cost of providing the service.

The fact that infrastructure services do not pay for themselves and the government continues to subsidize the beneficiaries has resulted in low availability of funds. With increasing requirements, this has meant deficiency in volumes as well as quality of service. Consequently, a parallel unorganized sector for provision of many of these services has developed, resulting in high prices and qualitatively deficient services. From a societal point of view, these are expensive solutions. *It is high time that a commercial approach is adopted.*

Municipal governments are rarely able to generate surpluses large enough to finance big infrastructure projects. Borrowing allows them to undertake infrastructure development projects. In principle, it promotes inter-generational equity by having successive generations pay for the infrastructural service.

In this context, the Credit Rating Information Services of India Ltd. (CRISIL), a credit rating agency in India, drawing upon the experiences of its partner, the Standard and Poor's Rating Services of USA, undertook an exploratory exercise to evaluate the credit quality of municipal entities in India, 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 Rs. 1 billion bond issue, indicating a credit risk profile in the adequate safety category. Since then, the 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 and parastatals have since accessed capital market funds, with the back-up of CRISIL and two credit rating agencies namely, the Investment Information and Credit Rating Agency (ICRA Ltd.), and Credit Analysis and Research Limited (CARE) who have developed their own criteria and systems for evaluating the creditworthiness of municipalities. The fiscal incentives offered by the Government of India in the form of tax exemptions to eligible issuers, defined in the Ministry of Urban Development's Guidelines for Issue of Tax Free Municipal Bonds, have given a further stimulus to the municipal bond market. The guidelines stipulate that the issuers are to maintain a debt service coverage ratio of at least 1.25 throughout the tenor of the bond. This over-collateralization and the provision of a debt service reserve account serve as measures to reduce risk to investors. Key features of the tax-free bonds are contained in the following Chart.

Chart 1
Key Features of Tax-Free Municipal Bonds

Key Features		
Eligible Issuers	➠	Local self governments, other local authorities or public sector companies* duly constituted under an Act of Parliament or state legislature; other local authorities constituted under relevant state government statutes like water supply and sewerage board; and groups of local authorities through a financial intermediary.
Use of Funds	➠	Capital investments in urban infrastructure namely, potable water supply; sewerage or sanitation; drainage; solid waste management; roads, bridges and flyovers; and urban transport if it is a statutory municipal function.
Requirements ***(a) Project Development***	➠	Project development consisting of an approved investment plan including phasing and a financing plan; benchmarks for commencement and completion including the milestone dates for the proposed components of the project; completion of the process of pre-qualification of bidders; initiation of the process of land acquisition and other statutory clearances.
(b) Financial Viability	➠	Financially viable i.e., generation of a stream of revenues sufficient to finance the project; creation of an ESCROW account for debt servicing appointment of an independent trustee for monitoring the Escrow account.
(c) Other Conditions	➠	Conformity with laws governing borrowing; maintenance of a Debt Service Coverage Ratio (DSCR)** of 1.25 through the tenure of the tax-free municipal bond.
(d) Project Account and Monitoring	➠	Maintenance of a separate account as also establishment of a separate Project Implementation Cell.
Investment, Maturity and Buy-Back	➠	Minimum maturity of five years, with the option for buy-back arrangements of the face value of the bonds.

Key Features		
Ceiling on Amount	➠	Maximum amount of tax-free bonds as a % of total project cost will be 33.3% or Rs.50 crore whichever is lower; debt-equity ratio not to exceed 3:1; contribution of 20% of project cost from internal resources or grants.
Credit Rating	➠	Mandatory to obtain an investment grade rating.
Legal and Administrative Requirement	➠	Adherence to guidelines issued by the Securities and Exchange Board of India (SEBI).

Note:

* Public sector company means any corporation established by or under any Central, State or Provincial Act or a Government company as defined in Section 617 of the Companies Act, 1956.

** Debt Service Coverage Ratio (DSCR) is defined as the ratio of net income after meeting all obligations and liabilities of the issuer (except the long term debt obligations) to long term debt servicing obligations.

The nine municipal corporations which have accessed the capital market have thus far been able to raise Rs.6185 million, by issuing bonds. An important feature of municipal bonds is that with the exception of bonds issued by the Bangalore Municipal Corporation and Indore Municipal Corporation, other bonds have been issued without a state government or a bank guarantee. Traditionally, lenders to entities in the infrastructure sector have sought a state or a sovereign guarantee as an important security mechanism. The fact that municipal entities have begun to raise resources in the capital market on the strength of their own credit standing and credit enhancements based on escrowing of the cash flows, indicates a growing acceptance in India of municipal bonds as an instrument for raising resources for financing infrastructure projects. Municipal bonds in India are securitized debt instrument, providing future revenue flows from the project as collateral.

Credit enhancement is usually a guarantee provided by a third party to pay the interest and principal on a bond if the issuer is unable to make the required payments. In municipal bonds issued in India, the same purpose is achieved by escrowing a part of the future cash flows which are used for making the required payments.

At the heart of any credit system is a revenue stream that the borrower does not use for day-to-day operations. Borrowing for investment purposes is equivalent to capitalizing an income or revenue stream. The borrower receives funds today to pay for project construction. In return, he signs away the right to an annual revenue flow in the future in favour of the lender. The more certain and predictable is the revenue stream, the greater is the security for a loan.

CREDIT RATING FOR DEBT FINANCING

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.

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.

Box 2

Credit ratings are:

- *assessment of the ability and willingness of a borrower to make full and timely payments.*
- *opinions as to the credit quality of the issuer throughout the life of the bond.*

Credit ratings are not:

- *recommendations to buy, sell or hold a security.*
- *opinions about the general quality of a government or statements about the quality of life in a community.*
- *Opinions about the correctness of a government's policy decision.*

The World Bank, 1999. Credit Rating and Bond Issuing at the Sub-national Level.

[13] A recent Presidential Decree in Russia requires regional governments to obtain ratings from international credit rating agencies before borrowing on the foreign market.

Credit rating is mandatory for debt instruments with a maturity exceeding 18 months. The three major credit rating agencies, viz., CRISIL, ICRA, and 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. The frameworks that they use are outlined below:

CREDIT RATING INFORMATION SERVICE OF INDIA LTD. (CRISIL)

Legal and Administrative Framework

The legal and administrative framework for accessing the capital market is defined in or drawn from the relevant provisions of state municipal laws which lay down the legal and administrative status of a municipality. The laws also outline the obligatory and discretionary functions of a municipality. A clear, unambiguous legal and administrative framework and fiscal linkages with the higher tiers of government, and budgeting and auditing procedures are a pre-requisite in any exercise involving its rating. It is used to shed light on the process that is involved in taking important decisions as also on the transparency and responsiveness of a municipality on important spheres of its functioning. Emphasis is also placed on the system of intergovernmental grants.

The legal and administrative framework comprises an evaluation of the borrowing powers and the administrative requirements for mobilizing funds from the capital market. The limits imposed on borrowing are taken as an important consideration in credit enhancement of bond ratings. It includes ceilings on debt levels and the manner in which sinking fund balances are transferred and monitored.

Economic Base

The economic base of the area that the municipality is responsible for is a robust indicator of the citizens' capacity to bear escalation in tax rates and user charges. The economic base is thus analyzed with respect to the level of industrial and commercial activity, income levels, numbers of vehicles registered, numbers of telephone line including cellular phone penetration, bank deposits, property development, and other indicators which point to the existing and potential level of economic activities. The analysis focuses on the capacity of the city to contribute to the municipal revenue-raising base.

Municipal Finances

An indepth analysis of municipal finances, as detailed out in the revenue and capital account transactions, forms an integral part of the credit rating exercise. As a part of the analysis, receipts and expenditures are assessed; the debt profile of the municipality and its accounting policies are considered as key inputs to the analysis. In the first stage of analysis, the overall surplus or deficit on revenue account is assessed; an overall surplus, if it is on account of postponing critical capital and revenue expenditure is not necessarily a positive feature of the financial analysis. The composition of revenues in terms of relative proportion of tax and non-tax revenues is studied. In the absence of cost recovery for services that are provided by municipalities, the quantum and proportion of tax revenues assume importance in assessing their fiscal autonomy.

Non-tax based revenues which comprise user charges and income from municipal properties are analyzed as a distinct component of revenue receipts. Revenue receipts from user charges are specifically examined which highlight consumer categories, past and existing rates, and the basis of levying charges (flat rate or consumption-related). Another critical aspect is the level of state transfers (shared taxes and grants or compensations) in relation to revenue receipts, which indicates the dependence of a municipality on state resources.

The level and stability of capital receipts as well as their judicial deployment towards capacity building is assessed as a part of the financial analysis. A track record of consistent, rising developmental capital expenditure is viewed positively as it builds the economic infrastructure and thereby, improves the level of civic services that are provided in the service area.

Assessment of Existing Operations

An understanding of the existing operations of a municipality through a study of the range of services provided by it and comparing it with its obligatory and discretionary services as defined in the relevant statutes is important to a rating exercise. To assess the operating efficiency, an indepth analysis is undertaken of its core activities including water provision (area and population coverage, per capita water supply, and treatment capacity), sewerage (coverage and sewerage treatment capacity), and primary education and health services (number of schools, hospitals and the like). A low level of current service levels indicates pressure on the municipality to increase spending. The organizational arrangement of a municipality is also evaluated with respect to its capacity to be able to augment service levels, revenue incomes and expenditures, etc. Also examined are the proposed levels of service enhancement by analyzing projects in works, their completion schedules, and alternative institutional arrangements like privatization.

Managerial Assessment

Experience with municipal bond ratings suggests that the financial health of a municipality is, to a significant extent, linked to the initiatives taken by its management to enhance the resource base and improve the level of municipal services. It is, therefore, considered important to analyze the organizational structure, administrative systems and procedures, project management skills as well as the level of control exercised on expenditure, the ability to manage political forces, and the initiatives taken to enhance resources and improve collection mechanisms.

Project-Specific Issues

In respect of project-specific bonds, the existing level of services, the improvements envisaged from the project, the project costs, means of funding the project, and the effect of debt-funding on the debt service coverage ratio of the concerned municipality are comprehensively examined.

CRITERIA FOR RATING MUNICIPALITIES: CARE'S METHODOLOGY

The Credit Analysis and Research Limited (CARE) considers parameters such as the fiscal profile of bond-issuing municipal body, profile of the project being financed and its related risk factors, revenue streams assigned for repayment of bonds, the level of local government autonomy, and the administrative capability of local government, amongst other factors. It evaluates the legal set-up within which the local body operates including the power to raise debt, responsibility to repay debt, power to authorize specific issues, revenue raising powers, pending litigations affecting the status of debt, and inter-governmental fiscal structure. While evaluating the fiscal profile, financial parameters such as the composition of revenue and expenditures, revenue surplus or deficit, margin of surplus or deficit, 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, and quantum of state budgetary support and the nature of operating expenses are examined. It also studies the debt specific factors such as the delays in past loan repayments, current debt burden, debt service coverage ratio, degree of reliance on short term borrowings, maturity profile, and 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.

Also evaluated are factors such as the state of the local economy, local employment characteristics, demographics, development indicators, and prioritization of expenditure across projects. It looks at the administrative and legal issues, such as organizational structure, management information system, tax billing, collection and enforcement mechanism, ability to implement plans and degree of autonomy given to the local body. CARE’s methodology carefully analyses the linkages between the above-stated factors, while assigning an appropriate rating to the debt instrument.

ICRA’S RATING METHODOLOGY FOR ISSUANCE OF MUNICIPAL BONDS

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.

The ICRA looks at the overall profile of the issuer in terms of the area that it services together with its demographic and socioeconomic profile. It conducts a detailed assessment of the 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. Also studied are major revenue heads in terms of trends and composition and expenditure patterns of key operating departments. It also appraises the ongoing and proposed projects from the point of improvements in service delivery and funding arrangements.

The analytical methodology used by Standard & Poor's focuses on the range of economic system and administrative factors, budgetary performance and flexibility, and the financial position of the rating entity. It evaluates sovereign-related factors as, in its view, the credit standing of sovereign governments has a significant impact on the credit profile of sub-national and local governments. While evaluating local governments, the Standard & Poor's examines the parameters affecting the local economy which include economic structure, growth prospects, and demographic profile of population. It assesses 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. In evaluating the financial performance, it analyses the revenue sources and flexibility therein, expenditure trends, liquidity, debt burden, and off-balance sheet liabilities.

A PROFILE OF MUNICIPAL BONDS

Bangalore City Corporation (BCC)

Bangalore Mahanagarpalika issued the first municipal bond in India for Rs.125 crore with a 7-year maturity and a coupon rate of 13 per cent. The purpose of bond issue was to raise capital for developing roads, drains, and street lighting in Bangalore. The Rs.125 crore bond programme of Bangalore City Corporation (BCC) was awarded "A+(SO)" (pronounced A plus structured obligation), based on credit mechanism in the form of an unconditional guarantee by the Government of Karnataka (GOK) to meet the debt servicing obligations on the rated bonds. Therefore, the rating reflects the ability of the GOK to service the debt obligations on the rated bonds. The principal and interest payments are secured by way of structured payment mechanisms, i.e., collection and deposit of property tax and state government grants to on escrow account, which are to be used to pay bond holders and supervised by bond issue the Karnataka State Finance Corporation.

The decision of the Bangalore City Corporation to seek a state government guaratee for accessing the capital markets was guided by the non-availability of other credit enhancement instruments. Replicability of this form of credit enhancement on a large scale is questionable, given the relatively weak credit profile of many state governments and their large contingent liabilities on account of the already outstanding guarantees.

Ahmedabad Municipal Corporation (AMC)

Ahmedabad Municipal Corporation (AMC) issued bonds of Rs.100 crore at 14 per cent payable semi-annually. Designed as a structured obligation, the issue secured a credit rating of “AA(SO)” (pronounced “Double AA Structured Obligation” – High Safety), rating based on escrowing of octroi collections from ten designated collection centres for servicing the obligation on the bond issue. The repayment mechanism involved the collection and deposit of octroi receipts from the identified check-posts during the lien period, into a central octroi collection account in a designated bank, specifically opened for this purpose. During the lien period, the requisite funds (interest and principal payments) are required to be transferred directly from the AMC’s central octroi collection account to a designated bank account. Trustees are authorised to operate the escrow account till the final redemption of the bonds. The lien period varies between 180 days for interest payment and 360 days for payment of principal amount. A key point to note is that the escrow structure provides for prioritization of cash flows for payment to bondholders, which reduces the risk of misallocation of revenue streams for other expenditures prior to debt servicing. In effect, this bond issue has the taken the form of a superior debt issue, where payment to bondholders is given priority over payment to other creditors.

The credit enhancement structure is different from the concept of pure revenue bonds, which are a typical feature in the United States. The structure of this bond issue provides for dedicating other revenue streams of the AMC for meeting debt servicing obligations in the event of octroi abolition or insufficiency of octroi revenues. Therefore, this structure is a blend between a general obligation bond and a revenue bond.

Nashik Municipal Corporation (NMC)

Nashik Municipal Corporation (NMC) raised Rs.100crore at 14.75 per cent interest to finance projects such as water supply and underground sewerage, flyovers, bridges, and truck terminals. CRISIL has given these bonds, a “AA (SO)” rating, which is based on the escrowing of octroi revenues from three pre-determinedoctroi collection centres for debt servicing under the supervision of a Trustee. The rating was subsequently downgraded to “AA-”, the stand-alone rating of Nashik Municipal Corporation due to the non-implementation of the proposed credit enhancement, but upon completion of documents relating to credit enhancement, the original level of “AA (so)” was restored.

The change in credit rating even when credit enhancement **via** escrowing of octroi collection was not crucial on account of the high stand-alone credit rating of NMC, combined with such covenants as the maintenance of pre-specified debt servicing coverage ratios are examples of problems that are characteristic of countries where municipal bond markets are in an early stage of evolution.

Ludhiana Municipal Corporation (LMC)

The Rs.10 crore term loan programme of Ludhiana Municipal Corporation (LMC) was awarded in June 1999, a “LAA-(SO)” (pronounced L double A minus structured obligation), indicating high safety. The credit enhancement used in this case involved transferring the entire water and sewerage charges into a no-lien escrow account, till the amount collected in the account was sufficient to cover the two succeeding payment obligations (interest and principal) of the term loan.

The credit enhancement is similar to that used in the AMC and NMC, where escrowing of revenues streams forms the basis for enhancing the rating. The key difference lies in the earmarking of non-tax revenues such as water and sewerage charges to part finance a water supply and sewerage project.

Nagpur Municipal Corporation (NGMC)

The Rs.50 crore bond programme of Nagpur Municipal Corporation (NGMC) has been awarded a "LAA-(SO)" rating, a rating which carries high safety. The rating is based on a specified structure, which requires the NGMC to escrow cash flows from property tax and water charge collections for servicing the bondholders. The NGMC is required under the arrangement to pay equal annual instalments collateralised into a no-lien escrow account from property tax collections over the tenure of the instrument. The inflows into the escrow account is to be invested in approved securities. Interest earned on investments are to be reinvested into this account. Water charges collected are also to be escrowed into a second no-lien escrow account for meeting the recurring interest liability. Arranged by the State Bank of India Capital Markets Ltd., the issue carries a maturity of 7 years, with a put-and-call option at the end of 5 years, and a redemption option at the end of 5, 6, and 7 years.

The rating of this issue takes into account the NGMC's past performance which has been consistently good, and characterised by low debt level, and other management initiatives for improving tariffs. The rating draws comfort from the structure, which is based on stable revenue stream of property tax and water charges. If the Government of Maharashtra (GOM) abolishes octroi, NGMC's financial position would be adversely affected; however, under this scenario, it is expected that GOM will compensate the municipal corporation with alternative sources of revenues.

Madurai Municipal Corporation (MMC)

Madurai Municipal Corporation (MMC) issued bonds amounting to Rs.30 crore by way of private placement at 12.25 per cent interest without a guarantee. The bonds are in the form of secured redeemable, and non-convertible debentures, and are taxable. A rating of "LA+(SO)" (LA plus structured obligation) was assigned to this bond issue; the bond amount is to be used for a two-lane inner ring road, and to refinance the then high cost loan from the Tamil Nadu Urban Development Fund (TNUDF). The rating indicates adequate safety.

The rating is not for general obligation of the Madurai Municipal Corporation (MMC) but is specific to the bond issue, the redemption of which is backed by the toll collections from the Madurai Inner Ring Road Project (MIRR). The rating factors have accounted for the structured payment mechanism which has isolated the toll collections by means of a no-lien escrow account. The rating also factors in the credit strength provided by the commitment of the Government of Tamil Nadu (GOTN) to make good any shortfall in the repayment of principal and interest due thereon during the tenure of the bond.

Hyderabad Municipal Corporation (HMC)

The Rs.82.5 crore bond programme of Hyderabad Municipal Corporation (HMC) was awarded a “AA+(SO)” (pronounced double A plus structured obligation), indicating high safety with regard to timely payment of interest and principal on rated bonds. The purpose was to partly fund the Corporation’s plans to invest Rs.247.5 crore in various development projects.

This bond issue carries a two-level credit enhancement mechanism, comprising escrow cover and cash collateral. The bond issue has a tenure of seven years comprising semi-annual interest and principal repayments, with the principal repayment commencing at the end of the fifth year from the date of the issue. The escrow, covering interest payment up to year 5, comprises receipts from professional taxes, advertisement revenues, stamp duty revenues, town planning revenues, and non-residential property tax revenues. Interest and principal repayments, which fall beyond year 5 are covered through a cash collateral of Rs.78 crore, currently available from the accrued revenue surplus. The State Bank of Hyderabad is the Trustee for this issue.

In this structure, the corporation is able to enhance credit rating of the bond issue while at the same time, retaining the past revenue surpluses. This structure is possible to be replicated by those corporations which have created substantial revenue surpluses.

Indore Municipal Corporation (IMC)

Indore Municipal Corporation (IMC) issued non-convertible redeemable bonds of Rs.10 crore at 11.5 per cent payable annually. The bonds were issued through private placement with guarantee from the state government. The proceeds are to be utilized for improving city roads. The bonds are redeemable in three instalments of 30 per cent, 30 per cent and 40 per cent, payable at the end of 5, 6, and 7 years.

Tamil Nadu Urban Development Fund (TNUDF)

The Tamil Nadu Urban Development Fund (TNUDF) has been awarded a "LAA+(SO)" (L double A plus structured obligation) rating for a Rs.110.05crore long-term debt programme. The TNUDF is a pilot venture, designed to involve the private sector in funding infrastructure development. This rating indicates high safety. The instrument has a structured payment mechanism, which requires the TNUDF to maintain a bond service fund (BSF) equivalent to one year's principal and interest payment as collateral through out the currency of the bond. The rating factors are based on mechanisms instituted by TNUDF, which has resulted in high collection efficiency, zero non-performing assets, continued support of the Government ofTamil Nadu in the form of guarantees and set-off mechanisms, well-established systems and procedures, insignificant asset-liability mismatch, and a comfortable liquidity provided by its surplus funds.

Thane Municipal Corporation (TMC)

The AA (SO) rating on Thane Municipal Corporation's (TMC) bond programme indicators high safety with regard to the timely payment of the interest and principal obligations on the rated instruments. The rating assigned reflects the corporation's strong stand-alone credit quality and the strength of the credit enhancement mechanism provided for the instrument structure through an escrow ofoctroi collections. The stand alone credit profile of TMC deceives significant comfort from its clearly defined revenue raising powers and borrowing powers under the provisions of the BPMC Act 1949 and its service area coverage of a relatively high-income population in close proximity toMumbai. TMC's revenue sources are well diversified with octroi contributing 58 per cent of the revenue income combined with property tax and water tax.[14]

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[14] Details on the interest payable and the projects for which these funds will be used are not available at the time of preparing this study report.

Table 16

Municipal Bonds

City	Amount (in Rs.million)	Placement	Guarantee	Interest	Escrow	Purpose	Rating
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Ahmedabad	1000	Public & Private	No	14%	Octroi from 10 octroi collection points	Water supply and sanitation project	AA-(SO)
Bangalore	1250	Private	State government	13%	State government Grants and property tax	City roads, street drains	A-(SO)
Ludhiana	100	Private	No	13.5% to 14%	Water & sewerage taxes and charges	Water supply and sanitation project	LAA-(SO)
Nagpur	500	Private	No	13%	Property tax and water charges	Water supply project	LAA-(SO)
Nashik	1000	Private	No	14.75%	Octroi from four octroi collection points	A (SO)	AA-(SO)
Indore	100	Private	Yes	NA	Improvement of city roads	City road project	
Madurai	300	Private	No	12.25%	Toll tax collection	Water supply and sanitation project	LA+(SO)
Ahmedabad (tax free)	1000	Private	No	9%	Property taxes of two zones	Road construction and widening	AA (SO)
Hyderabad (tax free)	825	Private	No	8.5%	Non-residential property taxes, advertisement tax, profession tax, etc.	Water supply and sanitation projects in 14 ULBs	LAA+(SO) AA+(SO)
Tamil Nadu (pooled financing)	110	Private	*	9.20%	Monthly payments equal to one-ninth of their annual payments.		

Source: Compiled from Bond Issuance Brochures.

* The USAID provided a backup guarantee of 50 per cent of the bond's principal through its Development Credit Authority.

The quantum of municipal bonds issued (Rs.6,185 million) thus far is a small fraction of the total debt market in the country, and can at best be called an initial attempt to tap the potential of the growing debt market in the country. It underlines the importance of market-based financing of municipal infrastructure. Access to the capital markets fosters commercially viable urban infrastructure projects and improves governance and accountability on the part of municipalities. A distinctive feature of municipal bonds in India is rooted in the financial strength and fiscal discipline of borrowing municipalities – in the taxes they raise, cash balances they keep, user charges they are able to put into practice, and toll collections as credit support mechanisms.

Box 3

SELECTED STANDARD AND POOR'S DEBT-RATING DEFINITIONS

A Standard & Poor's corporate or municipal debt rating is a current assessment of the credit worthiness of an obligor with respect to a specific obligation. This assessment may take into consideration obligors such as guarantors, insurers, or lessees.

The debt rating is not a recommendation to purchase, sell, or hold a security, inasmuch as it does comment as to market price or suitability for a particular investor.

The ratings are based, in varying degrees, on the following considerations:

(1) Likelihood of default capacity and willingness of the obligor as to the timely payment of interest and repayment of principal in accordance with terms of the obligation.

(2) Nature of and provisions of the obligation.

(3) Protection afforded to, and relative position of, the obligation in the event of bankruptcy, reorganization, or other arrangement under the laws of bankruptcy and other laws affecting creditors' rights.

AAA Debt rated 'AAA' has the highest rating assigned by Standard & Poor's Capacity to pay interest and repay principal is extremely strong.

BBB Debt rated 'BBB' is regarded as having an adequate capacity to pay interest and repay principal. Whereas it normally exhibits adequate protection parameters, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity to pay interest and repay principal for debt in this category than in higher rated categories.

Debt rated 'BB', 'B', 'CCC', 'CC' and 'C' is regarded as having predominantly speculative characteristics with respect to capacity to pay interest and repay principal. 'BB' indicates the least degree of speculation and 'C' the highest degree of speculation. While such debt will likely have some quality and protective characteristics, these are outweighted by large uncertainties or major risk exposures to adverse conditions.

CCC Debt rated 'CCC' has a current identifiable vulnerability to default, and is dependent upon favorably business, financial, and economic conditions to meet timely payment of interest and repayment of principal. In the event adverse business, financial, or economic conditions, it is not likely to have the capacity to pay interest and repay principal.

D Debt rated 'D' is in default, or is expected to default upon maturity or payment date.

Plus (+) or minus (-): The ratings from 'AA' to 'CCC' may be modified by the addition of a plus or minus sign to show relative standing within the major rating categories.

5 A FRAMEWORK FOR EVALUATING THE FINANCIAL PERFORMANCE

INTRODUCTION

Capital market access is a useful, if not an indispensable, instrument for financing investment needs of municipal governments in growing economies. It has gained importance in recent years in view of the (i) continually rising population pressures on cities and towns and their consequential impact on the demand for municipal services and infrastructure, (ii) inability of the higher tiers of government to provide grants for financing services, and (iii) greater decentralization of spending decisions to municipal governments. Capital market allows a municipal government to undertake a capital investment programme than would otherwise be possible. It promotes inter-generational equity by making the future generations who are expected to benefit from capital works pay for them.

An important decision that municipal governments are usually faced with is from where to borrow for financing infrastructure projects: banks, financing institutions and specialized municipal bank or the market. In western Europe, specialized municipal banks supply much of the municipal credit in the form of long term bank loans. In the USA and Canada, municipalities sell bonds for raising resources. The difference between the European and US systems which use bank loans and bonds respectively are rooted in financial sector intermediation. A bank carries out the intermediation function by mobilizing savings, appraising and extending loans, and monitoring loans and the financial condition of borrowers. The bond market represents a kind of dis-intermediation. Municipal government bonds are sold directly to household savers and to financial institutions. The monitoring of municipal financial condition is performed by specialized credit institutions. Unlike bank credit where relations between a bank and municipality are important (often called relationship banking), municipal bonds constitute a form of direct access to the capital market. They represent a less personal connection between a borrower and lender. A bond is inherently more decentralized.

A bond is an effective instrument for financing decentralized investments.

An importance aspect of bond markets is the disclosure of municipal finance information in order to function effectively and be accountable. Developed financial systems making use of bonds have extensive public disclosure requirements that issuers must comply with. Unlike in the case of bank credit where a bank develops a comprehensive relationship with the borrower, a municipal bond market relies on a network of institutions and services for carrying out activities that from an integral part of the process of issuing bonds. These include, among others, decisions on where to obtain the advisory services or technical assistance on project design, and how to manage internal payment systems. It presupposes that these specialized tasks are possible to be performed in the economy where municipalities may be located.[15]

Market-based municipal lending helps to increase the efficiency and productivity of investments. The critical measure of efficiency and creditworthiness is a municipality's ability and willingness to repay its debts. From this perspective, it is important for municipal authorities to borrow as long as they are in a position to repay their debts with a safety margin.[16]

Credit rating of a municipality is a specialized task which in the contemporary financial market is to be performed by recognized credit rating agencies. As shown in the earlier section, it may involve a detailed assessment of the economic base of the city that a municipality is responsible for together with its growth profile and prospects of outstanding debts, financial operations, revenue and expenditure flexibility, and government's administrative and legal structures. It may need to consider the sovereign or statutory

[15] These activities entail substantial costs. It is often argued that these costs (e.g. legal cost, fee for underwriting etc.) may be unaffordable for smaller municipalities.

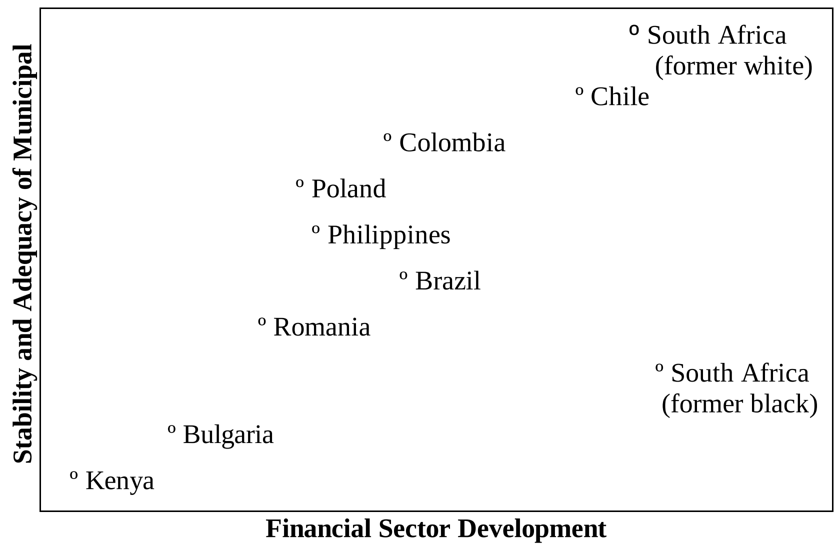
[16] There is abundant literature on when a debt may turn excessive. Excessive local debt would normally imply that the rate of return on projects financed by borrowed funds is lower than projects in the rest of the economy.

ceilings as well. What follows in the next section is a framework that lays down how a municipality may evaluate its own performance, with reference to debts, financial operations and revenue and expenditure flexibility, in order to decide if it is ready to seek a credit rating for accessing the capital market.

Box 4

MUNICIPAL CREDIT MARKET

Figure below provides an overview of a country's potential for municipal credit market development at a point in time. Along the vertical or y-axis is arrayed the stability and adequacy of the municipal finance system. This measures potential demand for municipal borrowing. Along the horizontal axis is shown the degree of financial sector development. This measures the economy's ability to assemble savings and to use financial intermediaries to supply investment financing in the form of credits. An example of a few countries may be seen below, using qualitative judgements as to their conditions in 1996.



Strategies for developing municipal credit markets should begin with an assessment of where a particular country stands. In the lower left quadrant are countries where any kind of municipal credit market development is premature. Kenya, for example, is plagued by a municipal system that leaves municipalities highly dependent upon central government transfers. Transfer policy is not spelt out in law. Central authorities determine the transfer amounts by non-transparent criteria, and often end up transferring less than has been promised. The different levels of government are also trapped in interlocking debts. Bulgaria is another country where municipal lending of any kind would seem to be pre-mature.

For countries in the middle range, there are options. Traditionally, they have used municipal development funds to meet local governments' credit needs (eg., Brazil). Other countries are in the midst of taking the first step toward establishing a municipal development fund, with external support. Countries in the upper right quadrant face a transitional decision. They are ready to integrate municipal lending into the general, private-sector credit market, but must decide whether and how they will make the transition. (G. Peterson. 2001)

EVALUATING THE FINANCIAL PERFORMANCE

For a municipal government to be able to raise resources in the capital market needs a thorough investigation of the legal and statutory framework which regulates its functioning, economy-wide performance and growth patterns, financial strengths and weaknesses of the entity itself, and the debt repayment capacity. Such an investigation forms a part of a formal exercise that is undertaken by a credit rating organization. However, a decision to enter the capital market needs to be preceded by an inhouse evaluation of the financial performance which would indicate its preparedness for raising market funds. What follows is a framework for evaluating the financial performance of a municipality, which must begin with an indepth examination of its budget. A municipal budget consists of (i) an operating budget comprising current revenues and operating expenditures, (ii) a capital budget comprising asset sales, investment grants from state governments, and proceeds from borrowings and bond issues, and (iii) fund financing. The constituents of the budget are as under:

- Operating budget: Current revenue
  - = Current revenues i.e.
    - own sources +
    - shared revenues +
    - operating transfers from state governments
  - (-) Current expenditure.
  - = Operative surplus or deficit.[17]
- Capital budget.
  - = Operating surplus +
    - asset sales +
    - investment grants from state government +
    - borrowed funds including bond issues (-)
    - investment + debt services
- Fund financing (Special funds)

[17] Strictly speaking, municipal governments may not post any deficit as all municipalities are required by low to balance their budgets.

- Earmarked streams of revenues set aside to finance debt service on specific capital projects.

Current expenditure comprises payment of salaries and wages, expenditure on administrative functions, and operating and maintenance costs of service delivery, whereas current revenues have standard revenue sources, such as tax revenues, receipts from fees, charges, fines and interest income from investments. Capital account inflows are categorized on the basis of sources of revenue. Accrual from borrowings, grants allocated for capital expenditure and sale receipts of assets constitute capital receipts, while capital investments include debt servicing and investment on infrastructure and services.

Operating Budget: Current Revenue

Tax Revenues

❶ Property taxes including taxes such as a house tax, water tax, sewerage tax, and other clubbed taxes such as lighting and connection fees in respect of the above and other taxes comprising octroi or entry tax revenues but not any compensation in lieu of octroi abolition.

❷ Taxes on animals and non-motorized vehicles, theatre taxes, and advertisement taxes.

❸ Shared taxes which include taxes that are collected by the state but shared between the state and municipalities, taxes on entertainment, profession tax, education cess, and surcharge on stamp duty.

Non-Tax Revenues

❶ Fees and charges which include fee levied for services as distinct from taxes, fines, and license fees levied by municipalities for granting permission for construction of buildings, and running of businesses and trades.

- ❷ Income from municipal properties, viz., rent or lease income from properties owned by municipalities. Profit on sale of municipal land is the realization from the sale, net of the cost at which land was acquired. If the initial acquisition cost of land is not recorded, the entire proceeds for sale is recorded as capital income for that year.

- ❸ Miscellaneous income, which include income from community events, sale of scrap, etc.

Grants and Transfers

- ❶ Revenue grants from the stategovernment which accrue in the form of general or specific-purpose grant, compensatory grant, and transfers under different revenue-sharing arrangements.

Capital Budget: Income Component

- ❶ Investment consisting of capital grants under specific schemes, (e.g.,Swarna Jyanti) or service-specific projects.

- ❷ Loans including those from the state government, national-level lending institutions such as HUDCO, loans from LIC, and municipal bonds.

- ❸ Others.

Operating Budget: Current Expenditures

Current expenditures are possible to be reviewed in several ways.

- ❶ Establishment: (salary and wages, pensions, gratuity, and other retirement benefits, and such expenditures as on uniforms, etc.).

- ❷ Administrative and general expenditure.

❸ Interest and finance charges: (interest on loans, interest on debentures and bonds, bank charges and other finance charges).

❹ Grants, contributions and subsidies (outflows).

❺ Provisions and write-off (provision for doubtful receivable discount and remissions, and revenues written off).

Repair and maintenance.

Depreciation.

Miscellaneous expenses (loss on account of the sale of plants and contingent expenditures).

Department-Wise Expenditures

Expenditure is possible to be analyzed for each department: expenditure on the operation and functioning of the municipal council; general administration; finance and audit; law department; public relations and vigilance department and election, collection of taxes and revenue department; public works and land and buildings; water supply; public health and medical services; sanitation and solid waste management; burial and cremation; public amenities like street lighting, parking lots, bus stops and public conveniences; slaughter houses; and family welfare, and social services and welfare of weaker sections.

Debt-Related Payments

Repayment of debt by municipalities may occur through two modes, viz., direct repayment by municipalities or through a sinking fund. Under the sinking fund mode, the municipalities make an annual contribution to a sinking fund, specifically aimed at future debt repayments. Payment to debt holders is done from the sinking fund. The annual contribution to and payments from sinking fund usually vary, and are shown separately. In addition, municipalities typically have an outstanding balance in the sinking fund. Thus, the debt parameters are based on the value of debt, net of the balance in the sinking fund, as it gives a better picture of the indebtedness of municipalities. For coverage parameters such as debt service credit ratio (DSCR), the overall surplus of a municipality is adjusted for sinking fund payments, by deducting the annual contribution to sinking fund.

Capital Expenditure

Capital expenditure consists of repayment of loans; refund of deposits to contractors; acquisition and purchase of fixed assets (land, buildings, roads and bridges, flyovers, sewerage and drainage, waterways, plants and machinery, vehicles, office and other equipment, furniture and fixtures, and other fixed assets; capital work-in-progress) and investments e.g., provident fund and pension fund investment.

Current Liabilities

Advance and Deposits

The net values (amount received-amount given) of advances and deposits are classified separately. Although cash-based, accounts followed by municipalities classify such inflows as revenues, these are, in effect, an increase in current liabilities.

Current Assets

Cash and Bank Balances

Cash and bank balances are used for the opening and closing balance. This is used as a check by comparing the difference between the two against the cash inflows of municipalities. The cash inflows comprise the overall surplus and deficit on both the revenue and capital account and net inflows due to advances and deposits.

Total Outstanding Debt

Values as per municipal accounts statement are taken and used to compute parameters measuring indebtedness.

MUNICIPAL FINANCIAL INDICATORS

The financial performance of municipalities is measured through various indicators. A summary of indicators used for evaluating the creditworthiness of municipal entities is given in table below. These indicators reflect the operational efficiency of municipalities as well as the conduciveness of the legal framework under which their operate.

Chart 2
Measuring Financial Performance

Ratio	Indicator
Operating revenue surplus / revenue receipts	Operating efficiency and surplus on the revenue account prior to debt servicing.
Revenue surplus / revenue receipts	Margin for municipal entities, considers cash flows after interest and principal repayment.
Debt servicing credit ratio	Debt repayment liability through operating surpluses.
Operating revenue surplus / interest costs	Interest repayment liability through operating surpluses.
Capital expenditure / total expenditure	Expenditure on improvement of services and development of infrastructure to total expenditure.
Operating revenue surplus / debts	Time frame within which debt is repayable out of own accruals.
Revenue receipts / debts	Level of indebtedness.
Capital grants + revenue surplus / capital expenditure	Level of capital expenditure supported by non-debt related inflows.
Own tax revenues / revenue receipts	Level of fiscal autonomy.
Revenue grants / revenue receipts	Level of dependence on the state government grants.
Establishment expenditure / revenue expenditure	Proportion of revenue expenditure requiredto meet wages and salaries.

Ranking of the ratios into (a) favourable, (b) good, (c) moderate, and (d) poor, helps to determine the performance of a municipality.

Table 17
Ratio Ranking on the basis of Indicators

Indicators	Favavurable	Good	Moderate	Poor
(1)	**(2)**	**(3)**	**(4)**	**(5)**
Operating revenue surplus / revenue receipts	>50%	>35%	>15%	<15%
Revenue surplus / revenue receipts	>40%	>25%	>10%	<10%
Debt service credit ratio	>4 x	2-4 x	1-2 x	<1 x
Interest coverage	>6 x	3-6 x	1.5-3 x	<1.5 x
Capital expenditure / total expenditure (inclusive of debt servicing)	>40%	>20%	>10%	<10%
Operating revenue surplus / Debt	>50%	>25%	>10%	<10%
Revenue receipts / Debt	>2.5	>1.5	>1.0	>1.0
Capital grants + revenue surplus / Capital expenditure	>0.75	>0.5	>0.25	<0.25
Own tax / revenue receipts	>70%	>50%	>25%	<25%
Revenue grants / revenue receipts	<10%	<25%	<50%	>50%
Establishment expenditure / revenue expenditure	<40%	<60%	<75%	>75%
Cost recovery: water	>75%	>50%	>25%	<25%
Collection efficiency: property tax	>75%	>50%	>30%	<30%

IMPLICATIONS OF MUNICIPAL BOND FOR THE URBAN REFORM AGENDA

The emergence of municipal bond market in the country represents an important breakthrough in channelising resources to the urban infrastructure sector. While the number of municipal bond issuances in the country is a small fraction of the total bond market, the demonstration effect of these successful issues holds an important place in the urban sector reform agenda. The municipal bond experience does not merely relate to developing additional sources of finance for investment in the urban sector. The very fact that more than 40 municipalities have subjected themselves to credit rating demonstrates an increasing acceptance of the need for independent evaluation and monitoring. Many municipalities have used the credit rating process as an important benchmarking tool to evaluate their performance. This process fosters a competitive spirit amongst local governments, which signals positively for the urban reform agenda.

Accessing the capital market through municipal bonds imposes market rigour and sets performance targets for municipalities. Municipal governments in such cases are required to share more information periodically with a larger financial community, which encourage transparency and place additional focus on developing and maintaining management information systems internally. Financial covenants imposed at the time of issuing the bonds serves an important check against financial imprudence. While the regulatory system of clearances by higher levels of government on local government borrowings serve as an administrative check on controlling the debt burden, capital market based tools such as changes in credit rating, and varying yields on bonds provide more effective warning signals on rising financial risks.

As the municipal bond markets develop more further, the desire to participate in the market itself would turn out to be a strong incentive to improve and maintain their creditworthiness. The proposed policy decision of the Ministry of Urban Development to set up a City Challenge Fund to provide incentives to municipalities and other local entities in order to improve their governance through creditworthiness is a step in the right direction and needs to be further deepened with appropriate provisions in the existing statutes to enable municipalities undertake on a regular basis credit performance exercises.

GLOSSARY

Accrual accounting: A method of accounting in which revenue is recognized when earned and expenses are recognized when incurred without regard to the timing of cash receipts and expenditures.

Bond rating: An appraisal by a recognized financial organization of the soundness of a bond as an investment.

Cash accounting: A method of accounting in which changes in the condition of a municipality (or organization) are recognized only in response to the payment or receipt of cash.

Coupon rate: The interest rate that is paid to the bondholders. The amount of interest is determined by multiplying the coupon rate by the par value of the bond.

Credit enhancement: A guarantee provided by a third party to pay the interest and principal on a bond if the issuer is unable to make the required payment. The most common types of credit enhancements are letters of credit issued by commercial banks and insurance provided by bond insurance companies.

Debt capacity: The total amount of debt a municipality (or organization) can prudently support given its earnings, expenditures and equity base.

Debt policy: A policy that establishes the guidelines for the use of debt by an issuer. The policy covers the maximum amount of debt that can be issued, the types of debt, the purposes for which debt can be issued, and the debt maturity schedule.

Debt-to-assets ratio: A measure of financial leverage, defined as debt divided by total assets.

Debt-to-equity ratio: A measure of financial leverage, defined as debt divided by shareholder's equity.

Debt service payment: The sum of interest and the principal amount of bonds scheduled to mature in a given year.

General obligation bond: A type of bond that is backed by revenue sources that are limited as to the sources or the maximum amount of the tax.

Maturity date: The date at which the issuer is obliged to repay the principal amount of the bond to the bondholder.

Revenue bond: A bond issued for either project or enterprisefinancings, secured by the revenues generated by the facility being financed.

Sinking fund: A fund of cash set aside for the payment of a future obligation.

Unlimited-tax, general obligation bond: A bond that is secured by the full faith, credit, and taxing power of the issuer. The issuer pledges to levy taxes or charges at whatever amount is necessary to repay the bonds.

Variable rate (or floating rate) bond: A bond whose coupon rate can change over the life of the bond issue. The variable rate is generally linked to the level of an interest rate index.

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