Report

Municipal Debt Financing in India

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CONTENTS

LIST OF TABLES

LIST OF GRAPHS

PREFACE

This study entitled *Municipal Debt Financing* in India is the first study on the subject to have been taken up in the country. The subject of municipal debts has neither attracted attention from policymakers nor has been a coveted area of research with the academics for the reason that much of the municipal infrastructure in the past was financed out of grants extended to municipalities by the state governments. The state governments also did not encourage debt financing of infrastructure even for those municipal bodies which were statutorily permitted to borrow for specified purposes.

Recent years have, however, seen in the country significant changes in the mode of municipal infrastructure financing. A number of specialized institutions have been established to finance infrastructure such as water supply, sewerage, roads and the like. The Ahmedabad Municipal Corporation has become the first local body in the country to have issued what are called Citybonds. These Citybonds are secured but do not carry any sovereign guarantee. Several municipal governments have taken steps to improve their credit performance in a bid to gain access to the country's expanding capital market.

It is in this context that the National Institute of Public Finance and Policy (NIPFP) decided to undertake a pilot study of municipal debt financing in 12 municipal corporations of the country, namely: Mumbai, Calcutta, Delhi, Chennai, Hyderabad, Bangalore, Lucknow, Jaipur, Bhopal, Ludhiana, Vadodra, and Trivandrum with a view to gain an *initial* understanding of the issues concerning the subject of municipal debt. The study was accordingly designed to probe into such basic questions as: what is the extent to which debt as an instrument is used for financing infrastructure? What is the use to which debts have been generally put? What are the sources of debts? What is the impact of such debts on the revenue budget of municipalities?

Results of the study confirm that debt financing has not been a particularly important instrument at the level of municipal corporations, although there exists considerable inter-municipal differences in its use. Debts comprising commercial bank loans, institutional borrowing, international agency loans, and open market borrowing accounted for only 9-10 percent of capital expenditure incurred by these corporations in 1994/95. Government grants financed two-fifths of such expenditures, while the share of internal loans and resources, recoveries and advances was estimated at about 22 percent. The study points out that notwithstanding the provision for a sinking fund for debt servicing, most corporations use general funds for this purpose. Mumbai, Chennai, Bangalore and Vadodra corporations, however, reported to have constituted sinking funds as a result of which they are able to better manage their debts.

Considering the position that state governments' own resources may not be able to provide adequate finances for the fast growing needs of municipal infrastructure as also the fact that debt as an instrument of financing infrastructure is more likely to gain in importance, NIPFP proposes to continue with its research interests in this area. A number of important questions that it wishes to pursue relate to the relative merits of tax-exempt and tax-loaded municipal bonds, the criteria for determining the debt carrying capacity of local bodies, criteria for placing limits on municipal borrowing, the regulatory framework for municipal borrowing and the like. For NIPFP, addressing the above set of issues will be a priority agenda of research.

This study on *Municipal Debt Financing in India* has been made possible by a grant from the National Institute of Urban Affairs (NIUA) under the Financial Institutions Reform and Expansion project (FIRE-D). We would like to express our deep appreciation to NIUA for the grant, as also for arranging a workshop in June 1997, where the preliminary results of this study were presented and discussed. We would like to place on record our appreciation to the United States Agency for International Development (USAID) for agreeing to the grant for this study.

At NIPFP, the study was conducted by Dr. Narayanan Edadan, and a team of researchers (Soumen Bagchi, Sudeshna Ghosh, Ishita Dasgupta, and Krishnakumar) under the overall guidance, planning and supervision of Professor Om Prakash Mathur. I appreciate their work in this relatively unexplored area. Rita Wadhwa ably assisted in editing and production of the report. Anurodh Sharma provided competent secretarial assistance.

The Governing Body of the Institute does not assume responsibility for the report or the views expressed in the report. That responsibility belongs to the authors of the report.

January 1998 **Raja J. Chelliah**
Chairman

Executive Summary

This study commissioned by the National Institute of Urban Affairs (NIUA) under the United States Agency for International Development – Financial Institutional Reform Expansion (USAID-FIRE) project aims to address the following debt financing issues at the level of municipal corporations in India. Some of these issues are: the legal and statutory frameworks within which municipal corporations are allowed to borrow from the market; the role of debt financing in capital expenditure; fiscal health and gross fiscal deficit; the structure and form of debt borrowing, debt servicing profile, debt servicing capacities, fiscal impact of debt servicing; and the fiscal and financial management issues involved in debt management.

This pilot study is based on 12 municipal corporations in India.[1] We have confined the scope of this study to municipal corporations because, we believe that the existing legal and resource arrangements favour them as better candidates for debt/deficit financing. Since one of the main objectives of this study is to understand the debt profile of corporations with varied levels of revenue capacities, we have selected our cases from octroi and non-octroi corporations.

Based on a structured questionnaire we have collected financial data from these corporations during the period FY1990–91 to 1994–95 alongwith a set of qualitative questions on the fiscal and financial management issues. However, we have faced limitations, such as, non-availability of audited budgets for all years, absence of a separate loan account for majority of the corporations, non-availability of accessible data on asset and liabilities, loan terms, purpose and utilisation, cash flow of debt servicing.

[1] Ludhiana, Mumbai, Vadodara, Jaipur, Lucknow, Delhi, Calcutta, Bangalore, Hyderabad, Bhopal, Thiruvananthapuram and Chennai.

A review of municipal debt in India suggests that varied definitions were used in earlier studies done by the *Zakaria Committee (1963) Reserve Bank of India (1970)* and the *Finance Commission (1978)* while estimating municipal debt.

We have defined municipal debt as government loans, market loans (open market and loans from financial institutions), interest bearing internal loans and external (World Bank) borrowing. [2]

While the *Loan Authorities Act of 1914* provides the general legal framework for municipal borrowing, relatively more freedom is given to municipal corporations as compared to municipalities on borrowing options; limits to borrowing, lateral guarantees, loan repayment arrangements, and investment of sinking fund surplus.

The limits to market borrowing vary across municipal corporations. While the *Mumbai Municipal Corporation Act* stipulates that the total outstanding debt of the corporation should not exceed twice the annual rateable value per budget, it is twice the value of municipal land and buildings, in the case of Bhopal. In the case of Calcutta, Chennai and Bangalore the limits are stipulated by the annual contribution the corporations have to make towards their sinking funds, which range between 10-12.5 percent of the value of land and buildings. Other municipal corporation acts empower the state governments to decide on the limits to market borrowing by the corporations.

However, in practice, municipal corporations are allowed to borrow from the market any amount based on their repayment capacities. Even though all market borrowings require approvals from the state governments, in many cases state guarantees are demanded. However, institutions such as HUDCO and IL&FS have started replacing state guarantees with bank guarantees.[3]

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[2] As compared to other municipal corporations, the Mumbai municipal corporation has mobilized about 55 percent of their loans from other sources such as interest bearing internal loan and central government loan during 1994–95.

[3] One of the consequences of this loan security arrangement is an increase in the cost of loan.

Debt financing is not a significant part of capital expenditure in majority of the corporations. Only six corporations have taken loans during the FY1994–95 to finance capital expenditure. The low level of debt financing is reflected by the following indicators. The average per capita debt borrowing during the FY1994–94 was Rs 40.02 which constituted about 7.5 percent of the total revenue, 12.46 percent of the tax revenue, 6.25 percent of the total expenditure and 26.6 percent of the total capital expenditure in the 12 municipal corporations.

We have observed wide variations in the level of debt as well. Chennai financed 89.58% of its capital expenditure through market loans, Bangalore (44.87%), Lucknow (11.52%), Mumbai (7.49%) and Thiruvananthapuram (5.42%), during FY1994–95.

However, the incidence of debt varied significantly across corporations. While the average outstanding debt per capita at current prices was Rs.331.98 in FY1994–95, in Mumbai it was as high as Rs. 983.48 as compared to less than one rupee in the case of Calcutta and *nil* in the case of Hyderabad. It is also observed that in real terms the outstanding debts of Lucknow, Bangalore, Vadodara, Thiruvananthapuram and Jaipur have grown more than the average (12 corporations) during the 1990–91 to 1994-95 period.

While the average per capita level of capital expenditure has increased from Rs. 87.9 in FY1990–91 to Rs. 150.44 in FY1994–95, it was as lcw as Rs. 5.09 in Calcutta and in the range of Rs.33.7 and Rs. 45.6 in the case of Lucknow, Bhopal and Bangalore. It is also alarming to note that the share and level of capital expenditure, which is the key to sustainable urban development, have decreased in Mumbai, Lucknow and Bhopal during the period 1990–91 to 1994–95, and are rather insignificant in the case of Calcutta.

Out of the 12 corporations, Vadodara, Ludhiana, Jaipur and Chennai have posted higher capital expenditure growth rates in real terms. The pattern suggests that while the average per capita capital expenditure has grown by 2.46% per annum in real terms, it was significantly high in Vadodara (73.04%), Chennai (36.07%), Ludhiana (32.65%) and Jaipur (26.1%).

While nearly all corporations have outstanding loans, except Hyderabad, the debt servicing ratios ranged from 23.5 percent in the case of Vadodara municipal corporation to 0.06 percent in the case of Bhopal municipal corporation. An important observation is that while the level of debt was not related to the octroi tax status of the corporations, the level of debt servicing was higher in the case of octroi corporations.

The composition of loan varied significantly across corporations. While Mumbai municipal corporation has the largest sources of loan,[4] about one-third of the total outstanding debt of all the corporations came from the state, and the direct market borrowing shared about 15 percent.[5] Even though almost all municipal corporations availed HUDCO loans, its contribution to the total municipal debt was only 1.7% as of March 1995. However, as compared to the state and open market loans, the share of HUDCO loan has increased significantly in real terms over the past five years. The HUDCO loans have registered an annual growth of 51.7 percent in real terms as compared to a significant decline in other sources of loans with the exception of the World Bank loan.

A high percentage of the debt was utilised for non-infrastructure projects. While the major sector of debt utilisation was water supply and sewerage, Calcutta and Bangalore corporations had spent a large percentage of their capital on remunerative enterprises. Since the average loan term ranged between ten and twenty years with 12–16 percent rate of interest, the long-term debt servicing solvency of these corporations is influenced by the debt management performances. This is found much wanting.

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[4] About 55 percent of the outstanding loan of Mumbai Municipal Corporation is contributed by internal loans (interest bearing borrowing from internal sources) and central government loans. Other corporations do not avail such facilities, except in the case of Vadodara corporation which takes interest free internal advances.

[5] This is based on the loans from the sources such as state loans, direct market borrowing, HUDCO loans, LIC loans and loans from the World Bank.

Even though all municipal corporation acts stipulate on the setting up of sinking funds for debt servicing, in practice, with the exception of Mumbai, Vadodara, Bangalore and Chennai, corporations use the general/ corporation fund for loan repayments. We have observed varied arrangements for loan repayments. Some of the corporations such as Calcutta and Jaipur have deferred repayment of state loans for longer period. In the case of Bhopal we have observed that the state government deducts the amortised value of the state loan annually from the octroi compensation due to the corporation. **However, the provision to borrow fresh debt to service old debts perpetuates the problems of debt trap and reduces the fiscal solvency of corporations.**

While the average per capita growth in outstanding debt in real terms (1.9%) was lower than the per capita growth rates in debt servicing (3.9%) and tax revenue (5.87%), it was not true in the case of Vadodara, Lucknow, Bangalore and Thiruvananthapuram corporations. This suggests that these corporations have drawn excess debt and their debt financing will not be sustainable if the present levels of high debt mobilisation and lower repayment continued in the future.

Interest constituted a large percentage of debt servicing. It is observed that the share of interest payment to total debt servicing has increased from 70 percent in 1990–91 to 77 percent in 1994–95.

While the average debt service ratio and debt service burden ratio have decreased over the 1990–91 to 1994–95 period, the debt service coverage ratios of majority of corporations have increased significantly during the period. Notable improvement in debt service coverage ratio (DSDR) have taken place in the case of Thiruvananthapuram, Bangalore and Jaipur. As indicated earlier, the DSCR of some of the debt-leveraged corporations has decreased during the same period.

A review of fiscal health of municipal corporations suggests that all corporations, with the exception of Lucknow, Delhi, and Calcutta have posted revenue surpluses during

1994–95. It is also observed that the operating balance has shown a fluctuating trend over time.

Even though the average per capita growth in revenue income is higher than per capita revenue expenditure, it is conspicuously low in the case of Mumbai, Lucknow, Calcutta and Bhopal corporations. Over the years the non-tax revenue income has grown higher than property tax in most of the corporations. A notable observation is that the share and growth of property tax are high in octroi corporations, suggesting that octroi does not replace other sources of tax revenue and it only increases the revenue capacities of octroi corporations.

An alarming trend is the complete neglect of capital improvement programs in almost all corporations. We have observed that while the share of expenditure on water supply and sewerage and administration has grown over the past five years, the share of expenditures on redistributive activities such as public health and sanitation has decreased during the past five years.

It is also observed that the share of property tax has decreased over the past years. What is more alarming is that many corporations have poor tax collection performance, particularly in the property tax. Constrained by the legal limits to the increase in base (general purpose) property tax, many corporations levy large amounts of service tax on the property. Therefore, the share of service tax constituted as much as 30 percent of the base property tax in some of the corporations.

However, we have observed improved revenue mobilisation performance in cities which have introduced property tax valuation reforms and privatisation of octroi tax collection, such as, Chennai and Jaipur.

Increasing dependency of non-octroi corporations on the state transfer raises important fiscal issues. The dominant share of state transfer in the revenue of some of the poorer corporations (Lucknow-60.87%, Calcutta-52.02% and Bhopal-60.59%) should be a matter of serious concern from the revenue predictability and fiscal autonomy perspectives.

The fiscal analysis suggests that it is necessary to rationalise the debt leveraging implications of "revenue surplus". It is observed that about 30 percent of the committed expenditure in some of the corporations has deferred, meaning that the "net surplus free for leveraging debt" would be only about 70 percent of the posted revenue surplus.

While the average the DSCR is 4.59, it is as high as 67 times in Thiruvananthapuram, 25 times in Jaipur, 33 times in Bangalore and in the range of 6 to 7.5 times in the case of Chennai and Ludhiana. Even of the corporations which raise relatively more loans have capacities, with the exception of Lucknow, to service one to two times more than the present level of debt.

While the average debt-service-ratio is within a reasonable level of 8.6 percent, it is as high as 23.5 percent in the case of Vadodara, 11.2 percent in Mumbai. Interestingly, none of these corporations experienced any serious debt-stress. Based on the experiences of these corporations, we may suggest that debt-service-ratio in the range of 10 to 12 percent is sustainable, if the local bodies manage their fiscal and financial arrangements efficiently.

However, based on the past growth rates of debt borrowing, debt servicing, particularly interest repayment, and total revenue, the debt borrowing of Vadodara, Lucknow, Bangalore, Thiruvananthapuram and Delhi corporations would not be sustainable unless and until more efficient debt management systems are implemented.

Corporations, such as, Mumbai, Vadodara, Chennai and Delhi, which were the main debt users, have to resort to additional means of resource mobilisation and expenditure management to balance their decreasing internal reserves in order to manage their existing level of debt servicing.

Debt financing is not effectively managed by the corporations, mainly due to poor budgeting, accounting and financial management systems. Use of incremental approach to budgeting, unrealistic projection of resources, excessive reliance on "advances" from the suspense account, poor expenditure management, non-assignment of loan charges to specific accounts, etc. are some of the accounting and financial management issues worth further attention.

Analysis on the fiscal effect of servicing the outstanding debt suggests that the additional fiscal burden for these corporations could be in the range of 7.5 to10 percent. In the context of property tax enhancement constraints (inefficient valuation and poor collection), these corporations have to find additional resources from non-tax sources and user charges to meet the increasing debt servicing obligations.

This highlights the role of non-tax revenue and user charges as important supporting structures of capital financing. Appropriate development of efficient service charges and cost recovery mechanisms could enhance project-based-debt-financing in municipal corporations.

The debt management profile suggests that corporations which have higher debt-total expenditure (debt burden) ratios have been able to realise operating surpluses as well. This supports the view that higher levels of debts need not bestow more fiscal burdens if efficient debt management systems are implemented.

With the exception of Vadodara, Lucknow, Delhi and Calcutta, some of the corporations have reasonable levels of operating surpluses to leverage capital investments. Significant levels of operating surpluses were observed in the case of Thiruvananthapuram, Bangalore and Jaipur corporations. These corporations could increase their present level of capital investment by about 150–200 percent.

However, what is alarming is that in spite of these huge operating surpluses these corporations have deferred capital expenditure debt servicing significantly. This

suggests that availability of internal resource capacity is not a sufficient condition for increasing the capital expenditure of corporations. It is necessary to develop adequate debt and project management capacities at the local levels to leverage higher levels of capital financing.

Analysis of gross fiscal deficit suggests that the level of gross fiscal deficit has increased in almost all corporations, with the exception of Thiruvananthapuram, and Bangalore, during the 1990–91 and 1994–95 period. **A comparison with the respective state level gross fiscal deficit suggests that creditworthiness of these two levels of governments are not related. This highlights the importance of developing efficient fiscal and financial arrangements at the level of local bodies to improve their creditworthiness.**

The study has shown that some of the highly debt leveraged corporations have to formulate efficient revenue mobilising and expenditure management strategies to ensure sustainability of debt financing and long-term service solvency. It is also observed that implementation of efficient debt servicing structures could improve the capital expenditure capacities of some of the corporations with significant levels of operating surpluses.

Debt servicing experiences of these corporations suggest that in the absence of appropriate structures for debt servicing, it would be difficult to manage the cash flow efficiently. In short, these corporations follow a "debt repayment strategy" instead of a "debt management strategy" and these practices do not yield positive sums.

In the context of emerging municipal bond issues two areas require further examination. Firstly, the issue of debt liability and the impact of uncontrolled local government debt on the internal debt of the country requires further research. International experiences from Canada and Brazil suggest that market discipline alone is not sufficient, and appropriate rule-based controls and administrative controls are required to balance the resource requirements of local governments with the internal debt concerns of the country.

Furthermore, the argument that municipal bonds should be treated as private debt instruments is not tenable from the liability point of view of public finance. Even though proper structured debt obligations could ensure efficiency in debt servicing, the question of debt liability in the absence of sovereign guarantees remains nebulous in the present context.

Finally the issue that requires further attention of policymakers relates to development of an efficient market which would ensure liquidity and efficient pricing of these debt instruments. While it is possible to mop up a reasonable amount of saving through these market instruments, in the absence of a proper market the long-term sustainability of capital financing as well as the entry of larger number of municipalities would be constrained. These are some of the concerns worth consideration.

CHAPTER 1

INTRODUCTION

Urban finance in India is a neglected field of public finance. Much of the earlier research has concentrated on the fiscal issues related to the centre and state governments. Since local governments are the creations of the states, their fiscal and financial management has been under the control of the state governments. State governments exert various levels of direct and indirect controls over the local governments. State politics have immediate impact on the type and pattern of governance at the municipal level. Since the states meet a significant proportion of the financial needs of local bodies via shared tax, revenue and capital grants and loans, local governments were in practice denied the opportunity or the need to raise loans on their own. Under the present market borrowing procedure, local governments are not encouraged to raise funds from the market without the explicit approval and in some cases the guarantee of the state government.

This has brought in a sense of apathy on the part of the local bodies to initiate market borrowing instruments or to develop their institutional arrangements. The municipal budgeting exercise under these fiscal and financing arrangements results in expenditure cutbacks. The line budgeting procedure followed by the urban local bodies permitted the continuation of the old trends. In fact, the present budget of any municipality is nothing but an extension of its past. This environment of state-local body fiscal relationship obviously did not provide much scope for the local body to initiate new methods to finance its increasing investment needs. The obvious results have been fiscal crisis at the local level, poor management of existing asset stocks, inefficient institutional capability to programme development initiatives, financial dependency, perpetuation of old fiscal trends, etc., leading to urban obsolescence and poor quality of life. Urban finance research under these circumstances did not go much further except to explore opportunities to broaden the own and shared tax base and attempt to tinker with some of the tax rates or to pursue policies to defer expenditures.

The above scenario of urban finance is expected to undergo some structural changes with the promulgation of the 74th constitutional amendment providing more fiscal authorities to the urban local bodies to raise revenue and manage expenditure.[6] The importance of municipal debt [7] financing has to be perceived in this context of changing functional and expenditure autonomy and increasing administrative and political decentralization of urban local bodies in India, particularly the large cities.

There are marked differences in the approaches and practices to debt financing and debt management at the central, state and local levels. Since fiscal decentralization is only in the formative stage in India, conceptual issues, such as liquidity of municipal debt instruments, debt liability, etc., related to debt management at the local authority level will continue till these institutional arrangements are formalized. The very difference in the objectives of central, state and local debt is reflected in the differences in debt management problems and practices between these tiers of governments. As compared to the economic stabilization objective of debt borrowing at the central government level, local governments use debt as an important instrument to achieve their allocation objectives. State government lending to local authorities is justified because of the inability of local authorities to generate their own resources to meet increasing capital investments and as such most of the capital investment at the local level is financed through direct and indirect state funding in the form of direct grants and loans and state approved market borrowings. The prevailing state and local government relationship is reflected in the practices and problems of municipal debt financing and debt management in India.

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[6] See Appendix 1 for a note on the 74th constitutional amendment.

[7] Unless and until specified, municipal debt in this study means debt of municipal corporations. Since the scope of this study is confined to the study of 12 municipal corporations, conclusions from this study should not be extended to municipalities. One main reason for this limitation is the differences that prevail in the statutory enactment of municipalities and municipal corporations acts. The scope and procedure for public borrowing by these agencies is very different.

The differences in the debt management problems faced by the central, state and local governments are reflected in the demand and supply dimensions of debt financing. On the demand side, the need for borrowing by local governments occurs primarily when substantial capital expenditures are to be incurred. For reasons we shall discuss in a section on the issue of liability, these expenditures are loan-financed rather than tax-financed. The rationale for borrowing at the local level is quite different as compared to the borrowing at the central level, where a stabilization policy is the main objective of debt management. On the supply side of the market for funds, unlike the central government, local governments do not have much control over the money market conditions under which they must borrow. Most of the loans are state funded and whatever little they can borrow from the market are either state approved or guaranteed. So the best that local bodies can do is to try to obtain favourable loan terms. However, the emerging municipal development financing trend through market instruments such as municipal bonds, project financing for municipal enterprises, etc., can change the financing environment at the local level and inculcate efficient financial management and fiscal discipline.

Municipal fiscal crisis and debt financing

Almost all local governments in the developing world and even in the developed world face development financing challenges resulting from fiscal crises. Indian cities are living examples of such fiscal imbalance crises. From this problem of fiscal imbalance between the growing expenditure and inelastic revenue authorities springs the problem of fiscal crisis. Literature on fiscal crisis is rich with divergent perspectives to analyse the causes and effects of fiscal crisis and the strategies to deal with the problem. These arguments are extreme in their contentions; on the one hand we have the "right-wing" private marketeers and on the other we have the "left-wing" structuralists. The "right-wing" economists argue that fiscal crises of local bodies are the results of the expanding government sector and the parasitic impact of public expenditure on .their private investments. This argument which some brand as the "parasite thesis" argues that the ever expanding public sector dwarfs the growth of the private sector. This group of "right wing" economists strengthens its arguments using the "crowding out" hypothesis of investment flows. The group's contention is that the cheaper fund government is able to generate for public expenditure using its fiscal authorities at the cost of private investment opportunities. Since public investments are less productive [8] as compared to private investments, this group argues that it is necessary to scale down the level of public expenditure and minimize the role of government. This argument has been instrumental in initiating the privatization approach in the United Kingdom during the Thatcher regime.[9]

The "left-wing" on the other hand argues that the expanding public expenditure is not the main reason for the fiscal crisis experienced by local governments. According to this group of economists the fiscal crises of governments are the result of not allowing the government to reap the benefits of its own investments.[10] Since the profits generated from state investments are accumulated in the private sector, it becomes difficult for government to recover its costs and to raise more money for future investments. In fact, what this means is that the state subsidises private productivity. To this group, since the state is excluded from most direct financial benefits derived from its investments, it is forced to raise the large bulk of its income through taxes and duties. This argument opens up issues related to the politics and psychology of taxation and financial autonomy of government to fund investment and to manage public expenditure efficiently with appropriate pricing and user charges for the services provided by the government and its functional agencies.

Market borrowing by municipal bodies to finance their investment needs is one of the means to achieve municipal finance management efficiency with accountability and

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[8] A good number of studies done during the late 80s do not support this argument that public enterprises are less productive as compared to private enterprises. Case studies on a large number of public enterprises have shown that given the right competitive environment public enterprises are as productive as private enterprises, See Yarrow G (1986), which means that privatization need not be a strategy for increasing the productivity of public enterprises.

[9] The theoretical framework for Thatcherism is provided by the work of Bacon R and Eltis W (1978), *Britain's Economic Problem: Too Few Procedures* (2nd ed.), Macmillan, London.

[10] The argument of the left wing on the fiscal crisis is well represented by the work of O'Connor (1973), *The Fiscal Crisis of the State*; St. Martin's Press, New York, For more recent discussion on the subject, refer, Carr H James(1987), *Crisis and Constraint in Municipal Finance*, Centre for Urban Policy Research.

transparency. As compared to the privatization strategy proposed by the "right-wing" and efficient public investment approach and pricing proposed by the "left-wing", municipal debt financing is a financing instrument capable of helping municipal agencies to mitigate the resource crunch and achieve financial management efficiency.

However, market borrowing could ease the problem of fiscal crisis as well as accentuate it. How far municipal debt financing can be an effective instrument to ease the problems emerging from the fiscal crises depends on many issues related to the local body's fiscal health, institutional fiscal arrangements between state and municipalities, fiscal and financial autonomy, debt absorptive capacity, debt management process, etc.[11] This study shall attempt to examine some of these issues in the context of municipal corporations in India.

Study scope and research concerns

A study of municipal debt in India involves conceptual and operational issues. The definition of municipal debt is not very clear in the Indian context, because under the present constitutional framework which governs the central, state and local body functional and resource authorities, local bodies are creations of the state with very little leverage for direct market borrowing.[12] This is mainly due to two reasons. First, state governments exercise market borrowing options at present and a large share of this debt is channelled to finance the capital investment needs at the local level. Since the capital investment requirements of local bodies are met by the state, urban local bodies are not given the resource handle to raise debts either from domestic public funding agencies or international agencies or from the public market without prior approval from the state. Secondly, municipal bodies in India have to undergo

[11] A flip side of this argument revolves around the macro economic monetary implications of non-capped state and local government market borrowing. Federal fiscal deficit and inflationary concerns at the centre are implemented through loan and market borrowing limits stipulated by the Working Committee consisting of the Planning Commission, RBI and the Finance Ministry. However, the issue of market borrowing by the local governments should be reflected within a balanced framework of macro-economic stabilization objective and allocation objectives of local bodies.

[12] While the municipal acts stipulate a balanced budget for urban local bodies, the municipal corporation acts do not present this condition. However, in practice municipal corporations aim to achieve balanced budgets and even surplus budgets.

significant financial and institutional restructuring to be "credit worthy". However, this borrowing perspective is expected to change under the new constitutional scenario of local fiscal reforms and shifting paradigms in the state government guarantee conditions stipulated by the funding agencies.

Under the existing, but obsolete, *Local Authorities Loan Act 1914,* municipalities are allowed to raise only up to Rs. 5 lakh from the open market. Loan requirements above Rs. 25 lakh or when the loan repayment period is over 30 years, require central approval. However, the conditions and limits of market borrowing by the municipal corporations are different. Even though a few major corporations stipulate the market borrowing limits in relation to the Annual Rateable Value (ARV) and the value of the land and building owned by the corporations, generally the limits are determined by the state. As a result the incidence of municipal debt is negligible. During FY1976–77, municipal public debt comprised only 10.12 percent of the municipal income [13]. A recent estimate by the Kerala State Finance Commission [14] suggests that the total urban local body debt in terms of interest and amortized loan repayments constituted about 7.67% of the total state level municipal expenditure in FY 1993–1994.

Municipal market borrowing could be a very important financing instrument if the provisions in the 74th constitutional amendment are implemented by the state governments. Subsequent devolution of resources will empower municipalities to use the borrowing handle free of over restrictive state controls. Even though various State Finance Commissions have articulated differently on the scope and content of resource and functional devolution, it could be said that the constitutional amendments would strengthen the decentralization process, transfer of authorities and responsibilities to raise loans from the public market either through the issuance of debentures, municipal

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[13] N. R. Rao (1986), *Municipal Finance in India,* Inter India Publications, New Delhi, p:234.
[14] Kerala State Finance Commission Report, Government of Kerala, 1994

bonds, revenue bonds or through any other special purpose vehicles could be instrumental in meeting the increasing capital investment needs of municipalities [15].

A main concern of the study is to understand the debt financing practices across various municipal corporations with varied levels of resource capacities and to identify issues related to fiscal arrangements to service debt. These issues are related to the very definition of municipal debt, legal and statutory provisions and framework of municipal borrowing, internal resource capacities, debt servicing profile, debt absorptive capacities. In order to propose any reasonable suggestions on the potentials for debt financing we should know the structure and pattern of debt financing and debt servicing capacities at present across municipal corporations.

Objectives of the study

This study has set the following objectives:

- What are the major conceptual issues involved in municipal debt financing in India?
- What are the legal and statutory frameworks within which municipal corporations are allowed to raise loans? Are these legal arrangements and practices the same across municipal corporations?
- Is the practice of debt financing widespread among municipal corporations?
- Does the fiscal health of corporations influence their debt profile?
- Is there any evidence for municipal debt stress, if so, how does it manifest itself across corporations with varied sizes and resource capacities?
- Do these corporations have additional debt servicing capacities?
- What are the issues involved in the enhancement of debt carrying capacity of municipal corporations?

[15] Even though none of the available State Finance Commission reports have articulated on the structure of market borrowing by the local governments, it would be appropriate to assume that devolution of powers and fiscal autonomy would strengthen the financial management and debt financing capabilities of local bodies.

Methodology

This study is based on 12 municipal corporations in India.[16] We have confined the scope of this study to municipal corporations because we believe that the existing legal and resource arrangements make them better candidates for debt/ deficit financing. Since one of the main objectives is to understand the debt profile of corporations with varied levels of revenue capacities based on octroi, we have selected corporations from two categories–octroi corporations and non-octroi corporations. We have limited the scope of the trend analysis to five years–1990–91 to 1994–95, while the FY1990–91 represents the pre-reform period, FY 1994–95 represents the post-reform period. Since the common period for which audited budgets are available is 1994–95 we have taken this year as the terminal year for the analysis. The growth rates are estimated using the exponential form of the regression model which was estimated through a semi-log regression model [17] at current prices and in real terms (1980–81 prices).

This is a pilot study, which attempts to understand a few basic issues related to the fiscal health and debt carrying capacities of municipal corporations in India. The comparative analysis across selected municipal corporations [18] tries to analyse their fiscal and debt stress as well as their capacities to leverage debt financing. The main objective is to find "outliers" without establishing any absolute norms or criteria. In spite of the limitations of comparative analysis, the following analyses attempt to bring out the "outlying municipal corporations" in terms of their fiscal health, debt usage, debt stress and internal debt servicing capacity.

Case Study Cities

Twelve urban agglomerations have been selected for the case study. The underlying assumption in this selection process is that large municipal corporations are better

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[16] Ludhiana, Mumbai, Vadodara, Jaipur, Lucknow, Delhi, Calcutta, Bangalore, Hyderabad, Bhopal, Thiruvananthapuram and Chennai.

[17] In the semi-log form the` ß' coefficient estimates provide the growth rates.

[18] 12 larger urban agglomerations are selected at random. The only criteria applied in this selection is larger national representation. Since Ahmedabad municipal corporation has been studied under the FIRE project, we have selected Vadodara as the sample city from Gujarat.

candidates for debt financing in India at present. Since one of the objectives of this study is to conceptualize the municipal debt and provide a methodology for analysing the debt structures, the scope of this study is limited to a few corporations. However, we propose that the study should be extended to all the other urban agglomerations and municipalities at a later stage to capture more comprehensively the debt profile of urban local bodies.

Information base

A better understanding of the debt profile requires a detailed analysis of municipal finance, municipal asset and liabilities, fiscal stress and debt burdens and debt servicing capacities of municipal corporations. A large number of ratios and indicators are used to understand the debt financing and debt servicing profile and capacities of the municipal corporations.

The questionnaire used for primary data collection is structured mainly into four parts;

- profile of municipal finance
- detailed information on the loans and market borrowing undertaken by the municipal corporations, terms of loans, loan utilization performance, role of debt in capital investment, loan repayment structures, etc.,
- fiscal health indicators of the municipalities to capture the debt servicing capacities, and
- lastly a few qualitative questions to the decision makers to capture their insight on the financing mechanism, fiscal decentralization process and rationalization of revenue and expenditure authorities, etc.

Limitations and Scope of the Study

Firstly, the scope of this study is limited to municipal corporations. Since municipal corporations acts in various states bestow functions and resources on their municipal corporations differently, inter-city comparison should be done judiciously.

Secondly, being a study on the debt profile of municipal corporations it is inappropriate to generalize municipal debt as the debt incurred at the city scale. This limitation is mainly due to the extreme variation in the functional structures of these corporations. On the one hand we have the city of Jaipur in Rajasthan with very few functions and resource authorities and on the other we have Mumbai (Bombay) in the state of Maharashtra and Thiruvananthapuram (Trivandrum) in Kerala with many more functional and resource authorities. Moreover, we have cities such as Vadodara (Baroda), Mumbai, which are responsible for the production and supply of water and sewerage and we have cities where these functions are provided by state level water supply and sewerage authorities as in Kerala. In Bangalore, Hyderabad and Chennai (Madras) these functions are provided by city-based separate government authorities (Table 1.1).

Another limitation relates to accounting and financial management practices followed by the various municipal corporations. While line budgeting and cash-based accounting are the common forms of budgeting practices followed by many corporations, we have cities following double entry accounting systems. Cities such as Chennai, Vadodara, Mumbai have more efficient and transparent financial management systems as compared to others. These divergent patterns limit the scope of policy implications emerging from the study.

Besides, our capacity to answer adequately the various questions raised earlier is constrained by the following data limitations:

- non-availability of audited budgets for all years;
- absence of a separate loan account for a majority of the corporations;
- non-availability of asset and liability data for a majority of the corporations; and
- inadequacy of loan specific information on loan terms, purpose and utilisation, sources of debt servicing, etc.

Chapterisation

This report is organized in six chapters. Municipal debt financing is an emerging financing instrument in the developing world. While this instrument is well developed in the western world, there are many conceptual and operational issues to be addressed in the application of this financing instrument in the developing world. Weak research base on urban finance issues, absence of adequate fiscal and financial autonomy to the urban local bodies, inadequate institutional arrangements, are some of the factors perpetuating these confusions. Being one of the first studies on municipal debt in the Indian context, this study addresses a few conceptual and operational concerns related to the scope and practices of debt financing in Indian cities. These research concerns, operational objectives and methodology are discussed in chapter 1.

The legal and statutory procedures for market borrowing at the municipal corporation level are discussed in detail in chapter 2 and highlight a few institutional issues. The debt liability and debt management concerns discussed in this chapter bring out some important policy and operational issues to be addressed while formulating desirable debt financing strategies.

The incidence and level of capital expenditure of municipal corporations are discussed in chapter 3. The growth and distribution of capital investment suggests that almost all municipal corporations have been facing serious capital deficits over the past years. In the absence of serious efforts on the part of these corporations to raise capital funds from the market, the level of capital expenditure is conditioned by the amount of capital grants and loans receivable from the state government and as a result the level of capital expenditure remained insignificant in many corporations. Except for a few major corporations such as Mumbai, Chennai and Vadodara, there is a general inertia on the part of the corporations to raise market borrowing. This chapter examines the structure and form of various sources of capital used by the corporations during the period 1990–91 and 1994–95. The stock and flow analysis of debt provides a better understanding of indebtedness and debt servicing capacities of the municipal corporations.

In chapter 4 we have examined the debt servicing profile of the corporations. Debt servicing profiles and stress are examined through a large number of ratios. Owing to poor levels of debt use and capital stock maintenance expenditure the level of revenue surpluses and the DSCRs (Debt Service Coverage Ratio) in some of the municipal corporations are significantly high. The debt servicing profile highlights interesting insights into the interest and loan repayment practices adopted by these corporations. While the municipal corporation acts stipulate the setting up of a sinking fund to service the debt, in practice, a majority of the corporations service their debts from the municipal funds. The various modalities of debt servicing practised by the corporations that are examined in this chapter provide some insights into the desirable structures of debt servicing.

Since the debt servicing capacities of municipal corporations are influenced by their fiscal health, chapter 5 examines a few indicators related to the fiscal and financial solvency and debt carrying capacities of these corporations in more detail. Issues such as fiscal imbalance, fiscal stress and resource mobilization capacity of the corporations are also being discussed in this chapter. The scope of the fiscal profile analysis, however, is limited to provide a better understanding of the debt financing and debt servicing capacities of the local body. Even though municipal asset valuation is an important element in the debt financing strategy, owing to the absence of adequate information, we could not undertake any meaningful analysis. This chapter also discusses the gross fiscal health position of municipal corporations and the fiscal frictional effects of debt servicing.

Study conclusions and future perspectives of municipal debt financing are discussed in chapter 6. The chapter also aims to indicate some pointers for future research in this area of municipal financing in India. Future perspectives in the development of market borrowing instruments for municipalities are reflected within the framework of desirable policy initiatives for improving the capital expenditure management capacities of local bodies.

Table 1.1 Fiscal arrangements of municipal corporations

Revenue source - I

A.	TAX	DEL	LUDH	JAI	VADO	MUM	CHEN	TRI	BANG	HYD	BHOP	LUCK	CAL
1.	Property tax	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2.	Conservancy	✓			✓	✓		✓		✓	✓		✓
3.	Tax on public markets				✓								
4.	Betterment levies				✓			✓	✓		✓	✓	
5.	Profession tax		✓		✓		✓	✓			✓		✓
6.	Advertisement tax	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
7.	Water tax				✓	✓		✓	✓	✓	✓		✓
8.	Latrine tax				✓	✓					✓		✓
9.	Light tax				✓			✓	✓	✓	✓		✓
10.	Trade and calling		✓		✓		✓				✓		✓
11.	Tax on animals	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
12.	Duties on transfer of property	✓			✓	✓	✓	✓	✓	✓	✓	✓	
13.	Drainage tax				✓	✓		✓		✓	✓		✓
14.	Tolls on ferries & bridges			✓	✓			✓			✓		
15.	Vehicle tax	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓
16.	Octroi		✓	✓	✓	✓							
17.	Fee on pilgrims				✓					✓	✓		
18.	Special cess on education/ library	✓			✓	✓			✓	✓			✓
19.	Any tax levied by the state government		✓		✓	✓	✓	✓	✓	✓	✓		
20.	Entertainment tax		✓			✓	✓	✓	✓		✓	✓	
21.	Tax payable by employer on menial domestic servants		✓										
22.	Tax on building application	✓	✓										
23.	Tax on carriages & carts			✓	✓	✓						✓	✓
24.	Reg. & stamp duty			✓	✓	✓							

Note. Del-Delhi; Ludh-Ludhiana; Jai-Jaipur; Vado-Vadodara; Mum-Mumbai; Chen-Chennai; Tri-Trivandrum; Bang-Bangalore; Hyd-Hyderabad; Bhop-Bhopal; Luck-Lucknow; Cal-Calcutta

Revenue source - II

B.	NON-TAX	DEL	LUDH	JAI	VADO	MUM	CHEN	TRI	BANG	HYD	BHOP	LUCK	CAL
1.	Water charges		-		✓	✓		-		✓		-	✓
2.	Charges from market	✓	-	✓	✓	✓	✓	-	✓	✓	✓	-	✓
3.	Charges from slaughter house		✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓
4.	Rents from shops and rooms	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5.	Trade licence fees		-		-	✓	✓	-	✓	✓		-	
6.	Building licence fees		-	✓	✓	✓	✓	✓	✓	✓	✓		
7.	Encroachment fees	✓	-		✓	✓	✓	✓		✓	✓		
8.	D & O trades		-		-	✓	✓	✓		✓			
9.	Removal of sludge from septic tanks		-		✓	✓		-	✓		✓		✓
10.	Sale of forms (copying fees)		✓	✓	-	✓		-			✓	✓	✓
11.	Building land sanction fees		-	✓	✓	✓		-					✓
12.	Mutation fees		-		-	✓	✓	-				✓	✓
13.	Rent on land & building	✓			✓	✓							
14.	Conservancy charges				✓	✓					✓		
15.	Total no. of own resources	12	14	13	30	29	16	19	15	20	25	11	21

Note. Del-Delhi; Ludh-Ludhiana; Jai-Jaipur; Vado-Vadodara; Mum-Mumbai; Chen-Chennai; Tri-Trivandrum; Bang-Bangalore; Hyd-Hyderabad; Bhop-Bhopal; Luck-Lucknow; Cal-Calcutta

A.	FUNCTIONS	DEL	LUDH	JAI	VADO	MUM	CHEN	TRI	BANG	HYD	BHOP	LUCK	CAL
1.	Lighting of the streets	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓
2.	Water supply and public drainage	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
3.	Removal of rubbish, filth	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4.	Maintenance & watering of streets, public places	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓
5.	Cleaning of debris	✓		✓	✓	✓				✓		✓	✓
6.	Maintenance of municipal buildings	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓
7.	Naming of streets	✓	✓			✓				✓	✓	✓	
8.	Numbering of buildings and premises	✓	✓			✓		✓	✓	✓			
9.	Removal of nuisance structure	✓	✓	✓	✓	✓		✓		✓	✓	✓	
10.	Extinction of fires		✓		✓	✓				✓	✓		✓
11.	Maintaining of slaughter houses, milk trade markets, butchers	✓	✓		✓	✓				✓	✓	✓	✓
12.	Disposal of the dead	✓		✓	✓	✓		✓	✓	✓	✓	✓	
13.	Registration of births and deaths	✓		✓	✓	✓			✓	✓			✓
14.	Action in case of contagious disease	✓	✓		✓	✓				✓		✓	
15.	Vaccination and Inoculation	✓			✓	✓	✓	✓	✓	✓			✓
16.	School hygiene	✓			✓	✓				✓			
17.	Mosquito control	✓			✓	✓				✓			
18.	Maintaining hospitals (Pub), dispensaries and anti-disease relief measures	✓			✓	✓	✓	✓	✓	✓		✓	✓

Note. Del-Delhi; Ludh-Ludhiana; Jai-Jaipur; Vado-Vadodara; Mum-Mumbai; Chen-Chennai; Tri-Trivandrum; Bang-Bangalore; Hyd-Hyderabad; Bhop-Bhopal; Luck-Lucknow; Cal-Calcutta

	FUNCTIONS	DEL	LUDH	JAI	VADO	MUM	CHEN	TRI	BANG	HYD	BHOP	LUCK	CAL
19.	Establish schools	✓			✓	✓							✓
20.	Improving agriculture including crop protection				✓							✓	
21.	Preparation of Master Plan and town planning schemes and implementation				✓	✓	✓	✓	✓		✓	✓	
22.	Regulation of offensive and dangerous trades	✓			✓	✓		✓			✓	✓	✓
23.	Make provisions for parks, gardens, lunatic asylums, dharamshalas	✓	✓	✓	✓	✓	✓	✓				✓	
24.	Construction of warehouses				✓	✓							
25.	Disposal of stray dogs and animals		✓	✓		✓		✓					
26.	Maintaining veterinary hospitals					✓		✓					
27.	Planting and maintaining trees				✓	✓	✓	✓					
28.	Medical training					✓	✓	✓	✓				
29.	Relief in time of famine				✓	✓							
30.	Taking census and making surveys					✓							
31.	Unless relieved by state govt. maintain a police force		✓										
32.	Provision of burning & burial ground		✓		✓	✓	✓	✓	✓	✓			
33.	Prohibiting prostitution		✓										
34.	Control and sale of food & drugs					✓					✓		✓
35.	Total No. of functions	20	13	9	25	31	12	18	11	19	13	15	14

Note. Del-Delhi; Ludh-Ludhiana; Jai-Jaipur; Vado-Vadodara; Mum-Mumbai; Chen-Chennai; Tri-Trivandrum; Bang-Bangalore; Hyd-Hyderabad; Bhop-Bhopal; Luck-Lucknow; Cal-Calcutta

CHAPTER 2

MUNICIPAL CORPORATION ACTS AND MARKET BORROWING:
Legal Provisions and Practices

Fiscal authorities of governments at all levels revolve around public revenue and public expenditure. Even though public revenue in its broad sense includes public borrowing, it is commonly disaggregated into own income and borrowed income, known as public debt. While public debt /borrowing could be considered as income of the government or its enterprises in the short run, in the long run it does not constitute public income owing to its repayment obligations. Public debt therefore carries with it repayment obligations and these obligations can be guaranteed or non-guaranteed as well as structured or unstructured [19].

Theoretical framework for market borrowing

An important issue in the context of increasing public debt financing, particularly at the municipal level is who are ultimately liable for public debt repayments. Public debt liability is non-personal as compared to private debt obligations unless and until debt agreements enforce legal liability on the part of government. Even if such a legal framework could be conceived, such liabilities are limited to a segment of the society such as income tax payers and property tax payers or public specific service users. Similarly, municipal debt could be structured with limited personal liability on the part of the local government as in the case of municipal bonds that are based on property taxes and other own tax resources of the local body. In this case the ultimate debt repayment liability will fall on the future property owners and sometimes partly on the tenants if appropriate covenants are formulated. While the future generation taxpayers will ultimately pay for the public debt with non-personal, i.e. social liability as in the

[19] Public debt can be defined in various ways. In the narrowest sense, it can be defined as debt of the government proper. A somewhat wider definition would be debt of the government proper plus debt of departmental public enterprises.

case of the municipal general obligation debt, future property tax payers ultimately will also be liable for debt repayments.

A general argument for the support of municipal debt financing either through commercial borrowing or through instruments such as municipal bonds (munibonds), particularly the general obligation municipal bond, is based on the perception that it will generate positive sum. Whether munibonds will generate positive or negative sum depends on the utilization of the debt and the utility and consumption preferences of the present and future generations. This is based on the premise that debt financing transfers the present burden to a future generation of taxpayers in the society. A positive sum means that while the present generation increases its consumption opportunities through debt financing, increased productive use of the debt yields a net positive benefit for the future generation as well. A negative sum assumes that the present generation is better off as compared to the future generation on which the burden accumulated debt repayment falls, implying that the debt resources are not productively utilized to realize a net gain. While private debt financing always presumed to yield positive sum, we cannot be sure about it as far as public debt borrowing is concerned. This brings us to the public finance rationale of debt financing.

Public finance rationale and scope of debt financing

From the perspective of resource allocation, public borrowing has generally been reserved for what is called "extra ordinary expenditure", as distinct from the ordinary, recurring expenditure. For financing the extra ordinary expenditure the government can either resort to extra ordinary tax or to borrowing. Since the present generation prefers to avoid a reduction in its current consumption as a result of a tax increase and often imposes a larger reduction in the consumption of a future generation through borrowing, often extra ordinary expenditures are financed through debt financing. Internal debt is possible when the individual preferences between present and future consumption vary. When the preferences vary, public debt operation converts some individuals into creditors and some others into debtors.

The common justification for extraordinary borrowing assumes that public borrowing operates according to the same principles as private borrowing. Indeed in his classic exposition of public debt, Viti de Marco states clearly his assumption that the budget of modern states develops in harmony with the budgets of citizens. Even though the earlier literature on public choice surely raised considerable doubt on this assumption, recent trends in private participation in public services provide support to this logic in the provision of some of the public services.

However, there is no rationale for inefficiency and mismanagement in public expenditure. While equity consideration is one of the main principles in public expenditure it does not warrant wasteful and unproductive utilization of public resources. However, a great deal of these wastes are inevitable in a political economy when the principles of governance are influenced by pluralistic and populist politics. One might argue that democratic governance is less efficient in expenditure management as compared to bureaucratic governance. How far decentralized devolution of resources and functions is capable of reversing these trends is a matter of contention.

A main classical economic justification of public borrowing is that it allows taxpayers to borrow at the government borrowing rate, which is often lower than private borrowing. The lower rate of public borrowing reflects the lower risk in government borrowing. Public borrowing as a means to finance "extra ordinary expenditure" is justified based on the lower borrowing cost for government. It is not clear whether this lower public borrowing rate represents a social saving, which is one of the theoretical justifications for public borrowing. The main reason why government borrowing is cheaper than private borrowing is due to the ability of the government to cover its risk through additional taxation and thereby enhance its creditworthiness. It is this taxation handle which provides the additional leverage to public borrowing to bid the fund from the market, prompting some to argue for a "crowding out" hypothesis of public debt. However, this rationale is undergoing significant modification under the changing paradigm of changing central-state and local government relations, minimum role of government and increasing private participation in the production and provision of public services and competitive capital market conditions.

However, contemporary developments in government borrowing witness a shift in the public market borrowing paradigm. Unlike the classical model in which the government is able to borrow cheap from the market owing to its "sovereignty" advantages, governments are forced to compete with the private sector for market borrowing at present. The "crowding out" argument of public debt gains more support in the present context of competitive bidding by public agencies to mobilise funds from the market. This situation is more true when governments float either zero discount coupons or deep discount bonds or tax-exempt bonds.

However, this strategy of public borrowing by paying more interest than the private competitive interest rates is totally against the classical public borrowing paradigm. Implementation of this borrowing is usually adopted by the government or by public agencies which suffer from market credibility either politically or financially. An instrument through which government agencies edge out the private sector borrowers from the market is through the introduction of tax-exempt government securities. The American experiences in tax-exempt government securities is a classical example of successful government borrowing from the market. Tax-exempt securities enable the government to mobilize funds at lower interest rates as compared to private sector borrowers, and also enable the municipal finance managers to gain significantly from the possibilities of investment arbitrage.

While the utilization of debt borrowing instruments such as zero-coupons, deep discount bonds and even the tax-exempt bonds by the government and public sector agencies is expected to increase in the future, public borrowings by the government at present largely rely on borrowing either through the central bank or commercial banks at lower interest rates using its sovereignty and solvency status. In the absence of any constitutional limitation to impose an additional tax to cover up the loss in the utilization of loan, government bankruptcies can be avoided. Since governments are protected from bankruptcies as a result of the unlimited liability conditions, and also taxpayers themselves ultimately bale the government from bankruptcy, public debt often edges out private debt from the market. The success of US munibonds suggests that market borrowing by the local bodies has tremendous scope in the future. What is, perhaps, required is a public debt strategy which will ensure a positive sum.

Constitutional provisions for borrowing by states and municipal corporations in India

State governments in India are allowed to borrow from the central government under Article 293 of the Constitution. This article empowers the central government to provide loan assistance to the states subject to the following guidelines:

(i) the executive authority of a state could resort to borrowing within the territory of India upon the security of the consolidated fund of the state within such limits, if any, as made from time to time be fixed by the legislature of such state;

(ii) the Government of India may, subject to such condition as may be laid down by or under any law made by Parliament, make loans to any State or, so long as any limits fixed under Article 292 are not exceeded, give guarantees in respect of loans raised by any state, and any sums required for the purpose of making such loans based on the Consolidated Fund of India; and

(iii) a state may not without the consent of the Government of India raise any loan if there is still outstanding any part of a loan which has been made to the state by the Government of India or by its predecessor government and in respect of which a guarantee has been given by the central government.

The market borrowing limits of the states are set by the *Working Committee* consisting of the Planning Commission, the Finance Ministry and the Reserve Bank of India based on their gross fiscal deficit. The committee decides the proportion of central loan assistance and the market borrowing limits of the states. According to the Reserve Bank of India records, the allocation of the net market borrowing for 25 state governments aggregated to Rs. 65,357.2 million in 1996-97. In the previous year, net market loans amounted to Rs.59,315.3 million and taking into account repayments of Rs. 3,429.4 million, the gross market borrowings were placed at Rs. 62,742.7 million. The loans during the current financial year were issued at a coupon rate of 13.85 percent for a maturity of ten years as compared with a coupon rate of 14.0% during the FY 1995–96.

At present, the limits to market borrowing by municipal corporations are not prescribed by states. The guidelines for giving "government guarantee" is prescribed on the basis of the recommendation of the *Public Accounts Committee*, 1969–70 and on the basis of Government of India guidelines for market borrowing. The state governments charge about half to one percent per annum as guarantee commission. Since under the present institutional arrangements corporations do not default, the state has no need to discharge the debt liability. Market borrowing by the states at present covers the loan requirements of municipal corporations and other urban development corporations, hence the level of independent market borrowing made by the municipalities through the issue of debentures is too insignificant to influence the total debt liability of the state governments.[20] However, this issue requires re-examination in the context of emerging market borrowing initiatives by some of the municipal governments in India. One of the issues which would require detailed analysis in this context is that if market discipline based rules are not sufficient to address the internal national debt concerns of municipal debt, what are the types of rule-based controls and administrative controls required. [21]

Definition of debt

Since government functions of revenue generation and expenditure are hierarchically distributed between central, state and local levels, public debt is consequently structured into central debt, state debt and local debt with various levels of fiscal and financial autonomy provided through the fiscal arrangements between these levels of

[20] Discussions with the Reserve Bank of India officials suggest that the RBI treats the emerging market borrowing initiatives by some of the municipal corporations equivalent to private borrowing and hence no sovereignty clause is attached. However, the issue of debt liability still remains answered.

[21] Teresa Ter Minassian, *Borrowing by Subnational Governments: Issues and Selected International Experiences,* IMF (mimeo), 1996.

governments. The various levels of public debt are discussed as the gross national debt, [22] formal national debt [23] and net internal debt at the central level, public debt and internal debt at the state level. [24]

Broadly, the internal debt of the centre includes market loans, treasury bills and bonds, and other loans. However the internal debt of the state government has limited coverage. According to the RBI, internal debt covers market loans, compensation bonds, ways and means advances from RBI, and loans by commercial banks and financial institutions.[25] According to this definition, internal state debt does not include loans and advances from the central government. The total public debt therefore is the total of internal state debt and loans and advances from the central government.

One major difference between the debt of the centre and debt of the state and local governments is that central government debts are not generally created for the explicit purpose of financing capital expenditure. For this reason, central government indebtedness is often attributed to economic stabilization, deficit financing, budget balance and other macro-economic strategies.

Total public debt and internal state debt can be defined in stock and flow terms. While stock refers to the outstanding total debt, flow refers to annual accretions to the stock. Total public debt and internal state debt in stock and flow terms are obtained after deducting the yearly loan repayments from these debt figures. While the total debt stock

[22] The gross national debt is defined as the internal obligations of the central and state governments which even include interest free loans and loans the debt servicing of which do not entail a reduction in the aggregate public revenue.

[23] Formal debt is a part of the gross debt and it consists of the formal liabilities of the central and state governments. This includes obligations without any interest payments or those servicing of which are a formality such as debts held by the government departments.

[24] A distinction may be made between internal debt and external debt. When internal debt is incurred, resources are just transferred from one sector to another within the country. It does not imply any additional real resources. On the other hand, external debt facilitates the use of additional real resources imported from foreign sources. This dichotomy is useful from the repayment perspectives.

[25]According to the *Finance Accounts* internal state debt includes market loans, ways and means advances from the RBI and loans and advances from the central government. It excludes small savings, provident funds and other loans from the category of internal debt. This definition used in the *Finance Accounts* is the same as the "Total Public Debt" defined by the RBI.

reflects the indebtedness of the government, net annual flow reflects their debt servicing capacities.

Definition of municipal debt

Local authority debt comprises loans from the central and state governments and market borrowing by the corporations and port trusts. Discussion on this component of local debt was initially provided by the RBI in its 1970 bulletin and subsequently by the *Seventh Finance Commission* in the Finance Commission Report of 1978. The *Seventh Finance Commission* while estimating the municipal debt has added the market borrowing along with the state loan obligations of the urban local authorities as compared to the debt definition used by the *Zakaria Commission Report* (1963) which has excluded market borrowing from the municipal debt.[26]

The RBI in its report on the finances of local authorities defined local outstanding debt as market loans, loans from the government and any other loans by the city corporations, municipalities and port trusts. However, while examining the share of local debt in the total public debt, RBI excluded the internal governmental debt, defined as the borrowing of the local governments from the central and state governments. The concept of municipal debt is not very clearly defined in India.[27] The confusion in the concept of local debt largely arises in the context of market borrowing by the local authorities owing to its liability obligations and functional overlapping between the state and local governments. This overlapping is due to state controls on local finance and expenditure decisions, non-financial objectives influencing capital investment and debt financing decisions, absence of political will to enforce fiscal and financial

[26] The *Zakaria Committee* has estimated the municipal debt in 1960-61 as Rs.68 million. According to the *Finance Commission Report* of 1978 the total municipal debt in 1976-77 was to the extent of Rs. 668 million and market borrowing constituted about 43% of the total municipal debt. Based on the average outstanding debt of the 12 municipal corporations in FY 1994-95, it is estimated that the total outstanding debt of the 23 urban agglomerations in India during the FY 1994-95 is about Rs.26,793 million and 48% of debt is comprised of market loans (other than central and state loans).

[27] See discussions by Rao N R (1986), *Municipal Finances in India: Theory and Practice,* Inter-India and Datta A (1984), *Municipal Finances in India,* IIPA, New Delhi on this subject.

discipline, etc. Added to these factors, the very absence of debt financing management systems at the municipal level and the absence of such felt need at the state and local governments level did not create an environment for the development of this capital financing instrument. Not surprising by, municipal debt is conceived differently by decision-makers at various levels of government.[28] These factors and the absence of required institutional arrangements at the municipal levels have created an inertia in the development of adequate approach to municipal debt financing in India.

Even though there is some confusion in the treatment of state and central loans in the estimation of local debt, for the purpose of this study *we have defined local debt as loans from the central and state governments, ways and means advances from RBI and other commercial banks, direct market borrowing, borrowing from commercial banks and financial institutions, interest bearing internal loans and international agency loans.*

These loans could be either short term or long term, guaranteed or non-guaranteed. Long term loans are those with more than one-year term and all those loans with less than one-year term are categorized as short-term debts. However, both short-and-long term loans and borrowings are included in the total debt estimate. This definition,

[28] **We have observed from our discussion with municipal officials that none of them seriously plan to repay state government loans. This is based on the understanding that either state loans will be written off or converted into grants in due course of time.**

however, excludes provident fund obligations and other categories of internal borrowings, such as, borrowings against reserves and deposits of the local bodies.[29]

[29] Municipal liabilities such as internal borrowing from the provident funds and payment obligations to public enterprises such as the electricity board, water supply and sewerage boards, etc., are perceived differently the municipal decision makers. One of the opinions that emerged during our discussions with local officials was that inter agency obligations should not be treated as liability because the public enterprise does not insist on the payments, and the state in turn does not insist on loan repayments by the enterprise, nor do the municipalities consider these repayment obligations with any recourse concerns. This in fact is a classical situation of the multi-party payment default syndrome; the state does not pay to the centre, the agency does not pay to the state and the local body does not pay to the agency, nor do the consumers pay to the municipality. This process leads to the conversion of a loan into a grant in the long run. A similar contention is also observed while treating loans from the state government. Since a large number of defaulted local government loans have been written off by the state or have been converted into grants, or the states do not insist on their repayments for political reasons, the debt repayment obligations of state loans have different implications as compared to recourse or non recourse market borrowing. Recent developments in the state loan system, however, suggest that loan repayments will be insisted upon by the states and the practice of adjusting the loan repayments against the sanctioned grants creates more awareness among the local authorities on the debt management implications. However, an alarming implication of this awareness is the general apathy towards debt financing among the local bodies. Many city administrators are not keen to raise state or market loans and they prefer to undertake capital investment projects sanctioned through capital grants provided by the centre and state rather than through loans.

Box 1

Municipal debt concept in USA, and a few developing countries

The concept of local debt is well defined in western countries. The Census Bureau in USA defines municipal debt as long-term credit obligations of the city and its functional agencies whether backed by the city's full faith and credit or non-guaranteed and all interest bearing short-term credit obligations. These obligations include debt evidenced by the legal instruments (judgement debt), mortgages, revenue bonds, general obligation bonds, notes and interest bearing warrants.[30] *This definition, however, excludes all non-interest bearing short-term obligations, inter-fund obligations, amount owed in a trust or agency capacity advances and contingent loans from other governments and city retirement funds. Long term debt includes debt that is payable more than one year after the date of issue.*

As compared to western countries, developing countries follow closer government controls on local authorities borrowing. This assumes different forms. One of the main arguments for central and state government lending to local bodies is the cheaper loan government is able to provide as compared to the market loans. The cheaper loan government is able to lend to the local authorities is compensated against the control it is able to exert on the local bodies to ensure that the investments by these local bodies are in consonance with the national priorities. In some of the African countries in West Africa and Nigeria local authorities are not allowed or encouraged to borrow. Even though more liberal policies are being followed in many developing countries many kinds of restrictions follow. In some countries these restrictions are related to the revenue and budgetary approval as in Egypt and in some other countries the quantum of local government borrowing is restricted to a certain percentage of the local revenue as in Sri Lanka. Some of the Municipal Corporation Acts in India stipulate similar limit on local body borrowing. [31]

[30] In some states in USA revenue bonds are excluded from the municipal debt definition. The rationale for this exclusion is due to the structured nature of these obligations. Since structured loan repayment mechanisms such as accrual account, credit enhancements, delegation of specific revenue streams through special purpose vehicles are legally implemented by these enterprises, revenue bonds obligations do not impact the municipal revenues.

[31] According to the *Bombay Municipal Corporation Act*, the total outstanding debt limit is about eight times the Annual Rateable Value (which is about Rs.40 billion) if all the budgets are taken into consideration and twice the value of municipal properties and other assets in the case of Bhopal Municipal Corporation. We have also observed that the annual borrowing limits of corporations such as Calcutta, Bangalore and Chennai range from 10% to 12½ % of the value of land and building owned by the city. A detailed discussion on the subject is given in a section on the comparison of borrowing procedures of some of the municipal corporations.

Debt financing before the 74th Amendment

A major source of local debt is government loans from central and state governments. A general rationale provided for the fund transfer from the central and state governments to the local governments is that these bodies are unable to obtain credit elsewhere. Indeed the very rationale for government lending is to provide funds to local bodies which have not been able to obtain them otherwise but who, for reasons of public policy, should be provided with funds. It is thus typically used as an instrument of allocation rather than as a stabilization policy, and as such, is particularly important in the context of developing countries where government-supported investment is an important feature of development policy. This very distinction between the central government debt and debt of the state and local governments has significant impact on the debt management processes and procedures.

The main source of finance for capital expenditure at the level of local governments is capital grants and loans from the state governments. In India since most of the local governments are faced with the problems of fiscal imbalance and very few corporations enjoy the luxury of revenue account surplus, capital projects that involve huge investments are funded through capital grants, loans from state and central governments and a small percentage through institutional and external borrowing.

Even though municipal corporations are permitted to borrow from the market through instruments such as debentures and bonds, state government approval and more often government guarantee conditions and the general reluctance on the part of the state governments to permit local bodies to borrow directly from the market limit the extent of municipal market borrowing. Since the credit limits set by the Planning Commission are not sufficient to meet the own debt requirements of the state governments, in practice state approvals for municipal borrowing are selective. In practical terms, the credit limits imposed by the Planning Commission and the overdraft conditions stipulated by the RBI for the state governments set the debt financing limits and practices of the local governments in the country. [32] Being creations of the state governments, local authorities in India are outside the statutory devolution of funds and planned expenditure allocation, and therefore are dependent wholly on the state in the matter of revenue and capital grants. As such the scope and content of market borrowing in the municipal corporation acts vary from state to state (Table 2.1).

The local bodies at present also have no access to capital markets because this function is largely performed by the state governments and that too under the guidelines stipulated by the RBI. As compared to the municipalities, municipal corporations in India are given more freedom to borrow from the market within the limit set by the state government. The borrowing powers are accorded by the state based on:

(i) percentage of total annual rateable value;

(ii) percentage of the municipal properties and assets;

(iii) percentage of own domestic revenue; and

(iv) saving accrued by the corporation over years.

Emerging debt financing perspectives

A great deal of discussion on the financial crises of urban local bodies revolve around the vertical and horizontal fiscal imbalances. The problem of fiscal gap between revenue and expenditure for providing urban services is accentuated by the accelerating pace of urbanisation, urban sprawl and the consequential growth in slum habitations, increase in the growth of urban income and the related demand for high quality public services, increasing service cost inflation and lower public sector productivity, etc., generate an increasing demand for more and more resources at the municipal level. Even though technological progress and economies of scale in providing urban services could conceivably reduce the expenditure for providing services in future, it is not likely that the increasing population growth will reduce the cost of providing urban

[32] The restriction has been imposed with a view to have control over their finances so that they may not indulge in extravagance. A local body which can borrow to an unlimited extent may be able to defy the policy of the national government and even break up the nation. In a less critical situation than this....(it) may drift into a position in which it is in danger of default (Hicks L U, 1971, *Federal Financing in a Developing Economy*, IIPA, New Delhi, p:232).

services at least in absolute terms. On the revenue front, urban local bodies are neither able to improve their revenue authorities nor generate more revenues from the existing authorities.

Constrained by the revenue limitation, urban local bodies in India are under constant pressure to depend on external financing such as grants-in-aid or development assistance from the state government. In spite of the many suggestions [33] to rationalise these external fundings to achieve financial and expenditure autonomy and revenue reliability of local bodies, the fact remains that the state governments in India have refrained from reforming the structure of these transfers for not losing controls over their local governments.

With the 74th constitutional amendment, the urban governance and financing scenario are expected to undergo significant structural changes. Devolution of functions and resources has been the main strategic concern of all *State Finance Commissions* constituted to conceptualize and propose devolution strategies and policies. The *State Finance Commissions* constituted by the various state governments under the aegis of the 73rd and 74th constitutional amendments have reflected on this issue fairly well. A large number of *State Finance Commissions* have recommended devolution strategies ranging from strengthening the tax and non tax base of municipalities and expenditure management to the creation of a "state pool" of tax and non-tax revenues to transfer fund to the local bodies, but none of the State Finance Commissions have given enough thought to the scope and structure of debt financing by the urban local bodies. [34]

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[33] Refer the *Zakaria Committee Report (1963)*, *Rural and Urban Relationship Committee Report (1966)*, *Report from the Study Group on Resources of Urban Local Bodies and Municipal Corporations*, Ministry of Works and Housing, Government of India, and various other *State Finance Commission* reports and *Taxation Enquiry Committee* reports.

[34] Some would argue that the SFCs are not obliged to examine the market borrowing issues. Since one of the main objectives of the Commissions is to examine the state revenue transfer and internal resource structures of local governments, their omission of market borrowing as one of the emerging capital financing instruments is striking.

Legal framework for market borrowing

The borrowing powers of municipal corporations in India are governed by the *Local Authority Loans Act* of 1914 and its successive enactments under the *Government of India Acts of 1917 and 1935*. The 1914 Act provides the basic legal and statutory framework for municipal borrowing in India. Even though various state governments have modified this Act to suit their fiscal environments, they retain the basic framework provided in the 1914 *Central Loan Act.* The various controls exerted by the central and state governments and monitored by the Reserve Bank of India on local government borrowing in India stem from this basic *Act of 1914*.

Any corporation in pursuance of the resolution passed by it at a special meeting or with the previous sanction of the state government and subject to the provision of section 31 of the *Reserve Bank of India Act of 1934* can borrow by way of issue of debenture or otherwise on the security of immovable property vested in the corporation or proposed to be acquired by it or of all or any taxes, fees or tolls levied by it. However, the *Mumbai Municipal Corporation Act* prescribes a limit for market borrowing based on the annual rateable value of property.

Borrowing purposes

Under sub-section (1) of the *1914 Act*, local bodies may resort to borrowing for the following purposes:

- carrying out of any works which it is legally authorized to carry out;
- granting relief and establishment and maintenance of relief works in times of famine and scarcity;
- prevention of outbreaks and spread of any dangerous epidemic diseases;
- any measures which may be connected or are ancillary to any purposes specified in clauses (ii) and (iii) above; and
- repayment of money previously borrowed in accordance with law.

Under these acts, the provincial governments have stipulated a few guidelines for local body borrowing such as:

a) period of local borrowing not to exceed thirty years;
b) interest offered by the municipal bodies will be in tune with the interest of government securities;
c) adequate provision for debt servicing;
d) municipal borrowings have the legal sanction from the provincial governments; and
e) municipal corporations and port trusts are allowed to issue securities.

The *Central Loan Act of 1914* and its further enactments did not undergo any substantial change in the Constitution of India and in the subsequent municipal corporation acts and municipalities acts of various states. Municipalities and municipal corporations are permitted to raise loans either from the state government or from the market with prior approval of the state government subject to the following condition that the loan raised by the municipal bodies should be utilized for the specified purposes permitted under the *Act*, such as:

- acquisition of land;
- undertaking famine relief works; and
- servicing old government and market loans.

Generally, municipal corporations are allowed to borrow from the market on the basis of the annual rateable value of property or on the basis of a fixed percentage of the physical assets of the corporation with a repayment period of loan varying from 30 to 60 years. [35] However, with the exception of *Mumbai Municipal Corporation Act* and the *Bhopal Municipal Corporation Act*, some of the municipal corporation acts are silent about this clause. Since market borrowing by the corporations is strictly regulated by the Planning Commission through its borrowing capping on the state governments

[35] As compared to the municipal corporation, market borrowing by the municipalities is restricted by the state government. Maximum direct market borrowing by the municipalities must not exceed 5 lakh and 25 lakh with government guarantee for a maximum repayment period of 30 years.

and monitored by the RBI, the scope for municipal corporation borrowing is often limited. Another reason could be the general apathy among the local bodies to seek market loans on their own due to the debt servicing difficulties experienced by them.

Under the present centre-state and local authority functional and fiscal framework, various states in the country have adopted this *Central Act* with slight modifications. While municipal corporations are given powers under this *Act* to borrow from financial agencies and from the public on the guidelines stipulated by the state governments, municipalities are not permitted to borrow from the market. Even though more freedom is given to municipal corporations to borrow for the purposes laid down in the *Act*, since approvals and at times guarantees by the state governments are often required by the financing agencies, state governments directly or indirectly have significant control over municipal borrowing. [36] The state government control is tightly enforced when the municipal authorities are indebted.

Generally, the interest rate charged by the state government for its loan to the municipal bodies is one to half a percentage above the market rate of interest as the charge for the government guarantee. In case of market borrowing with a state guarantee, the RBI does not permit payment of a higher rate of interest than the market rate for ordinary borrowing. Since the Ministry of Finance of the Government of India is not in favour of direct market borrowing by the municipal corporations for loans for more than one year, it directs RBI to settle the market borrowing terms and other conditions well in advance. These restrictions govern the current debt financing opportunities of municipal corporations in India.

Borrowing procedures

Rule 4 of the 1914 Act directs the local body to submit an application for loan to the

[36] For example the security for HUDCO loans for housing boards, development authorities, public sector organizations, etc. are (i) Government guarantee, (ii) Bank guarantee, (iii) Mortgage of property, (iv) Negative lien for housing boards and development authorities, (v) Interest bearing cash security. (HUDCO, Affordable Shelter and Services for All: *HUDCO's Financing Pattern*, October, 1996.

state government with the following details:

- purpose for which loan is required;
- amount;
- Production and distribution of water security for the loan;
- law under which the loan is proposed;
- schedule for loan disbursement;
- loan terms;
- revenue receipts and loan repayment expenditure profile of the local body; and
- for granting state government loans, the government may decide any other conditions on the loan terms and repayment mechanism.

When the local authority applies for a non-government [37] loan, the state government may sanction such application provided that the term of the loan does not ordinarily exceed the maximum period of 30 years. In granting or sanctioning the loan the state government may prescribe any further conditions consistent with the *Act* and with the rules, as it may think fit.

Borrowing purpose

The purpose for which loan applications are made and sanctioned by the state governments is governed by subsection (1) of the *Local Authorities Loans Act 1914.* The said *Act* is now old and the functions of the municipal authorities have since undergone considerable changes and the emphasis has also shifted to a large number of development works, especially in view of the importance given to decentralized governance in recent times. Some of the major purposes for which municipal corporations are permitted to seek loans are the following:

- production and distribution of water;
- sewerage schemes;
- slum maintenance improvement programmes;
- road construction and works;

[37] Non-governmental agencies refer to agencies other than government, such as public and private agencies.

- purchase of vehicles and other equipment;
- solid waste disposal systems;
- construction of low income housing;
- construction of markets, slaughter houses, etc.;
- construction of other public services and facilities; and
- repayment of old loans.

Borrowing sources

In addition to state government loans and other loan allocation through central government schemes, local authorities are permitted to approach the following non-government agencies for loans for the purposes permitted under the *Loan Act.* Generally, municipal corporation authorities have mobilized loans from the following non-banking institutions.

- LIC
- commercial banks
- HUDCO
- international agencies
- direct market borrowing

Local authorities are permitted to seek loan facilities from non-banking institutions only after formal approval from the state government and often the state government provided guarantees for such loans.[38] For all practical purposes, borrowing by the local authorities is governed by state government controls and regulations.

Security

The security for any money borrowed by the municipal corporations from any non-banking institutions shall consist of the immovable property belonging to the

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[38] Recent trends suggest that state government guarantees are not insisted upon by some of these financing institutions if the local bodies are ready to furnish bank guarantees.

corporation or proposed to be acquired by them or of all the taxes or of any tax which they are authorized to levy for the purposes of the corporation and any such property or

tax that can be mortgaged by the corporation for the purpose of securing the repayment of the borrowed money.

Limits to market borrowing

Generally, municipal corporations are allowed to borrow from the market based on the ARV of land and building assessable for property taxes. However, all the market borrowings require the approval of the state government. While in the case of a few municipal corporations the total market borrowing, including all outstanding debt, is limited to a fixed percentage of the value of the municipal immovable properties and assets as prescribed in the municipal corporation acts, in some others the annual borrowing limit is fixed as a percentage of the ARV of the property.

In the case of Mumbai municipal corporation, the total market debt limit, including all outstanding and balances, is prescribed at three times the ARV for the general purpose budget (A budget), slum improvement budget (B budget), education budget (E budget), and C budget (BES&T) [39] and two times the ARV for the G Water and Sewerage budget (G budget).[40] The total outstanding debt of the Mumbai municipal corporation, therefore, shall not exceed eight times the ARV. As of 1996, the ARV is estimated as Rs.5 billion and thus the total market debt of the corporation shall not exceed Rs.40 billion.[41]

> The corporation may, with the previous sanction of the state government, from time to time, borrow or re-borrow and take up at interest by the issue of debentures or otherwise on the security of any immovable property vested in the corporation or proposed to be acquired by it under this *Act* or of all the taxes or

[39] C budget is considered as a separate profit centre.
[40] While A,B,E and C budgets are kept on a cash basis, G budget is maintained on accrual basis.
[41] Mumbai Municipal Credit Rating by CARE, 1996.

of any tax which it is authorised to levy for the purpose of this *Act* or the Transport Undertaking or of all or any of those securities any sum necessary for the purpose of-

- defraying any cost, charges or expenses, incurred or to be incurred by it in the execution of this *Act*,
- for discharging any loan contracted under this *Act* or any other loan or debt for the repayment of which the corporation is liable;
- generally for carrying out the purposes of this *Act*, including the advance of loans authorised thereunder.... (Section 109, *Bombay Provincial Municipal Corporations Act,* 1949)

Similarly in the case of Bhopal municipal corporation the limit for total borrowing including outstanding and balances shall not exceed twice the value of immovable properties of the municipal corporation.

> Notwithstanding anything herein before contained the borrowing powers of the corporation shall be limited so that the sums payable under this Act shall not at any time exceed together with the balances of all outstanding loans and debts due by the corporation on the whole, double the annual value of the lands and buildings in the city as defined in section 138 (*Bhopal Municipal Corporation Act*, 1995, section 104).

In the case of other municipal corporations the debt borrowing is limited by a maximum percentage of the value of land and immovable property of the municipal corporation which the corporation has to contribute towards the sinking fund every year. While in the case of Calcutta municipal corporation, the borrowing is limited to a maximum of 10% of the value of land and other property (section 134 of the *Calcutta Municipal Corporation Act*, 1957), in the case of Bangalore municipal corporation it is 10% (section 156 of the *Karnataka Municipal Corporation Act*, 1976) and for Madras it is 12.5% (section 144 of the *Madras Municipal Corporation Act*, 1919). In the case of other municipal corporations, their *Acts* do not state any specific legal limit for market borrowing, except to provide the legal authority to the state to set the limit based on the internal resource capacities of the corporations.

Loan from the state government is mainly determined by the state capital expenditure outlays and the institutional policies of public investments. In the case of debt defaulting corporations, State governments follow strict financial controls while in the case of other corporations it is determined by the capital investment plan of the state and that of the corporations.

State approval of market borrowing

Interestingly, municipal corporation acts of Bombay, Calcutta and Madras enable these corporations to invest the sinking fund surplus with the commercial banks and take loans and advances against it after the approval of the state. In spite of these few additional financial borrowing choices, loan borrowing by all corporations is controlled by the state government. In addition to own guarantees based on the immovable properties and own revenues streams, all loans undertaken by the corporations require the approval of the state and it is common that often financing agencies insist on state government guarantees.[42]

The main recourse to loan repayment provided in the municipal corporation acts is the attachment of the municipal corporation fund. Even though all market borrowing by the municipal corporations is approved and in many cases guaranteed by the state, it is possible that this recourse, even though rarely put into practice, provides credibility to debt borrowing by the corporations.[43] It is observed that in the case of state loan

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[42] Recent developments in the guarantee system suggest that institutional lenders such has HUDCO and ILF &S do not insist on government guarantees, instead they approach the debt obligations in a structured manner to ensure efficient debt repayment. A direct implication of these policy changes, however, is an increase in the cost of the debt.

[43] The financial sense of guarantees from those state governments which are found to be non-creditworthy is often questioned in this context. Owing to the confusion and inadequacy of addressing the issue of debt liability at the local level, increasingly structured debt obligations and special purpose vehicles are proposed as debt recourse arrangements.

repayment delays by the local authorities, either the state government reschedules the repayments or in some extreme situations it adjusts the loan amount from the transfer of funds due to the local authorities.[44]

Investment of surplus fund

The cost of loans varies from the type of loans contracted by the government and non-government agencies. Generally, it varies between 12% to 14 % in the case of state government loans to 15–17.5 percent in the case of loans from the financial institutions such as HUDCO. The methods of loan repayments also vary across the local authorities and the type of loans contracted. Municipal corporations are required to create sinking funds towards the repayment of loans. While the interest payments for the loans are repaid on a yearly or half-yearly basis, the municipal corporations are obliged to deposit the annualized portion of the loan repayment to the sinking fund to be paid back by the end of the loan period. However since the investment of the proceeds in the sinking fund is governed by the municipality act, which prohibits the local authorities from investing in any other sources except with the nationalized banks, an asset-liability mismatch problem arises. Recently some of the local authorities were permitted to invest in long term deposits with the banks. However, there is always an interest rate mismatch for the local authorities.

Institutional requirements

While the municipality acts of some states specify a balanced budget and even a surplus budget by providing for one to three months of salaries and establishment expenses,[45] no such stipulations for balancing the budgets are given in the municipal corporation acts. This means that the budgets of the municipalities should allocate funds for

[44] This arrangement is practised in the case of the Bhopal municipal corporation where the state government deducts about Rs.13 lac annually from the state grant due to the corporation in lieu of the state loan repayment. We presume that in the event of resource devolution based on a "pooled fund strategy" as recommended by some of the State Finance Commissions, this type of loan repayment arrangement has significant scope.

[45] , for example, section 283 of the *Karnataka Municipalities Act*, 1964, Section 9 of the *Maharashtra Municipalities Act*, 1965, section 277 of the *Rajasthan Municipalities Act*, 1959, section 116 of the *Madhya Pradesh Municipalities Act*, 1961 stipulate such surplus allocations.

13–15 months of establishment costs in one current financial year. The implications of this deficit budgeting are reduction and avoidance of expenditure and poor asset creation by the municipalities. Whether to institutionalize the balanced budget approach or to permit deficit financing within a reasonable band is one of the issues which require further examination.

As compared to the balanced budget approach stipulated in the municipality acts, the municipal corporations are given more freedom to prepare their budgets based on their income and expenditure. Market borrowing is permitted as long as the said municipal corporation has made adequate provision for debt servicing while budgeting and the corporation is not indebted. Even though all municipal corporation acts stipulate the creation of a sinking fund, except for a few large municipal corporations, repayments of loans are made through the general account.

While preparing the budgets all municipal corporations are required to:

- provide for the payment as they fall due of all instalments of principal and interest for which the corporation may be liable on account of loans
- in the case of some corporations there should be separate provision for a cash balance of not less than Rs. 100,000 to Rs. 150,000 (Bangalore and Chennai respectively) under the General account revenue and also allow for the allocation from General account-revenue of the corporation of such sum not exceeding 10% of the total amount at credit on the said account as is considered necessary for expenditure of capital nature (Chennai). However these provisions are not common for all corporations.

Experiences in public borrowing indicate that while there is an increasing tendency for the central government to indulge in public borrowing practices in the development project financing pretext, local bodies have not availed themselves of this facility inspite of no constitutional restrictions.[46] One of the main reasons for this nebulous

[46] While the internal national debt in India is about 65% of the gross domestic product, the share of debt in the income of local governments is marginal.

institutional arrangement is the confusion on the debt liability. Another reason is based on the economic implications of debt borrowing at these two levels of government.

It is believed that central government public borrowing impacts in an increase in the national income being reflected in tangible benefits to the society which could be recouped through various tax and non tax instruments. As compared to this "income effect" of central government borrowing, municipal debt, particularly the general obligation debt, doesn't reflect in any significant increase in tangible and recoverable benefit in the community, except in property value increase. Under the prevailing situation of poor property tax base, inefficient valuation and unrealistic tax rates, even the "property tax effect" of municipal debt is not visible. This non-tangibility in the "capturable income effect of municipal debt" could be one of the main limitations for increased use of municipal debt financing in India. Owing to these institutional limitations to float general obligation bonds, many cities in the developing world are increasingly turning towards project specific debt instruments through structured debt obligations. While we ponder over ways and means of enhancing the financing capabilities of urban local bodies in India we have to try to understand and institutionalize the issue of debt liability and evolve appropriate systems to manage debt more efficiently resulting in a positive sum. This can be achieved only if the municipal corporations adopt debt management strategies instead of the present debt repayment strategies.

Issue of liability

An important issue relates to the creditworthiness of the local body and the political will to use the taxation or service pricing handles available to the local body to enhance its debt servicing capacity. The objective of such measures should be to create a positive sum by taking into consideration the intergenerational implications of debt financing. Public borrowing becomes more efficient and accountable only when public agencies are legally liable to debt servicing through proper agreements as well as by controlling the taxation handle of the local body through constitutional measures.

Debt is an important financing instrument which acts as both tonic and poison. It could be a tonic for better financial health of a system if the debt is well managed and it could also spread its tentacles of destruction and destabilise the organisation itself if poorly managed. Interestingly, local body debt defaulters are often baled out by the buyers of the debt itself. Since debt buyers in a community are the guarantors of local body debt and a debt default wipes out their wealth, they often vote for more debt to repay the old debt, thus perpetuating it. This is the paradox of the debt trap; the debt feeds on itself. In this context an interesting question could be who ultimately takes the burden of public debt default in a community. While we are eagerly pursuing strategies and instruments for developing and marketing debt instruments to municipalities, it would be useful if we also develop an appropriate institutional mechanism (rules and structures) for ensuring that debt servicing cost and the ultimate burden of debt default are distributed on the benefit principle. This is an important issue in the case of general obligation municipal bonds rather than revenue bonds or project specific financing instruments.

The presumption that personal debt yields a positive sum has two institutional features that compel such a presumption: (a) there is a personal liability; and (b) that liability reflects an agreement between the debtor and the creditor. As compared to personal debt, public debt could yield either a positive sum or a negative sum depending upon the way the debt is managed. Conventionally, public debt differs from personal debt on these accounts: liability for public debt is never personal, though it could be made so, and typically that liability represents less than full agreement between debtors and creditors. Perhaps, a proper legal system could enforce the obligations on the part of the government binding, similar to the personal liability of individuals.

Although liability is never personal in public debt, it is sometimes suggested that local debt finance provides at least a partial exception to the non-personal nature of public debt. Consider a situation where the municipal debt is financed through a general obligation bond and property taxes are the main resources on which such structured obligations are based. In situations which demand a bond referenda for floating municipal bonds, it is not only sufficient to get the majority votes of the public but also necessary to obtain a majority approval of the property tax payers. It is easy to see why this institutional regime might be thought to create a personal liability for collective debt choices. When property comprises the main tax base of local bodies, liability for debt amortisation rests on property owners in proportion to their property ownership shares. A property owner cannot escape the consequences of the community's debt choices either by migrating or by dying. In either case debt choices are reflected in future tax payments that will be higher than they would otherwise be, and those higher payments reduce the demand for property from what it would otherwise be. Hence debt choices are capitalised into property values.

Of course this is not true in the context of unorganised and speculative land and property markets. But one of the basic premises of modern capital market operations is that the various capital markets and financing instruments are transparent and the relative returns of investment options are mainly determined by their comparative risks and that the level of risks is influenced by market conditions and related organisational and institutional parameters rather than by regulatory evasion strategies.

So ideally, if the capitalised value of benefits from the services provided by the bond financing received by the property tax payers or service users is less than the capitalised value of the debt obligations on property, the tax payers might not approve such obligations. Of course, one of the main assumptions in this argument is that property tax payers' votes and referenda are legally required for floating such a debt obligation and their majority support is binding on such a debt financing process. Since the final impact of debt default falls on the property taxpayers, it is logical that such an approval mechanism is made legally binding for debt instruments rating. Since the credit rating of such debt instruments and even the creditworthiness of the institution is influenced by the anticipated increase in the valuation of property taxes, it is but logical to institutionalise the participation of property tax payers and service users in these debt financing processes.

Table 2.1 Comparative Analysis of a Few Municipal Corporation Acts on Borrowing

A.	Purposes	CAL	MUM	BANG	LUDH	BHOP	LUCK	HYD	CHEN
1	Construction work	*	*	*	*	*	*	*	*
2	Acquisition of land or building	*	*	*	*	*	*	*	*
3	Repayment of a loan	*	*	*	*	*	*	*	*
4	Pay-off any debt to govt.	*	*	*	*		*	*	*
5	Acquisition of a public utility concern	*		*	*		*		
6	Purchase of vehicles, & machinery	*							
7	Financing deficit in budget		*					*	
8	Advances of loans		*			*			
9	Execution of any permanent work over a period of time				*				
10	For slum clearance and construction of tenements			*					*

Note. Cal-Calcutta; Mum-Mumbai; Bang-Bangalore; Ludh-Ludhiana; Bhop-Bhopal; Luck-Lucknow; Hyd-Hyderabad; Chen-Chennai

B.	**Conditions**	**CAL**	**MUM**	**BANG**	**LUDH**	**BHOP**	**LUCK**	**HYD**	**CHEN**
1	No loan raised without the previous sanction of the government	*	*	*	*	*	*	*	*
2	No portion be applied to any purpose other than for which it has been raised	*		*		*	*	*	*
3	No portion shall be applied to the payment of salaries or allowances, unless it directly linked to the work for which loan was raised	*		*	*	*	*	*	*
4	Only for permanent work		*			*	*	*	
5	Amount of loan, rate of interest, date of floatation, time & method of repayment - s.t approval of the government	*		*	*		*	*	
C.	**Taking credit or advances against the sanctioned loans/ fund**	**CAL**	**MUM**	**BANG**	**LUDH**	**BHOP**	**LUCK**	**HYD**	**CHEN**
1	Borrow from any bank against any government promissory notes or other securities		*					*	
D.	**Limits of borrowing**	**CAL**	**MUM**	**BANG**	**LUDH**	**BHOP**	**LUCK**	**HYD**	**CHEN**
1	Percentage value of land and building	10%		10%					12½%
2	(Together with outstanding balances of outstanding loans) double the ARV		* (8 times for 5 budgets			*			
3	As approved by the state government			*	*		*	*	

Note. Cal-Calcutta; Mum-Mumbai; Bang-Bangalore; Ludh-Ludhiana; Bhop-Bhopal; Luck-Lucknow; Hyd-Hyderabad; Chen-Chennai

E.	Debentures	CAL	MUM	BANG	LUDH	BHOP	LUCK	HYD	CHEN
1	All debentures shall be issued with previous sanction of the government	*	*	*	*	*	*	*	*
F.	**Power of corporation to borrow money**	**CAL**	**MUM**	**BANG**	**LUDH**	**BHOP**	**LUCK**	**HYD**	**CHEN**
1	The corporation may issue debentures	*	*	*	*	*	*	*	*
2	Borrowing								
(i)	on the security of the immovable property vested in the corporation or,	*	*	*	*	*	*	*	*
(ii)	on the security of ail or any taxes, duties, tolls, cesses fees and dues or,	*	*	*	*	*	*	*	*
(iii)	on the security of both	*	*	*	*	*	*	*	*
3	Borrow any sum which may require for the purpose	*	*	*	*	*	*	*	*
G.	**Repayment mechanism**	**CAL**	**MUM**	**BANG**	**LUDH**	**BHOP**	**LUCK**	**HYD**	**CHEN**
1	loan repaid within the time period approved	*	*			*	*	*	
2	repayment shall be made								
(i)	from a sinking fund	*	*	*	*	*	*	*	*
(ii)	from partly sinking fund and partly loan raised for the purpose	*	*	*	*	*	*	*	*
(iii)	by equal payment of principal and interest					*	*		
(iv)	by equal payments of principal					*	*		

Note. Cal-Calcutta; Mum-Mumbai; Bang-Bangalore; Ludh-Ludhiana; Bhop-Bhopal; Luck-Lucknow; Hyd-Hyderabad; Chen-Chennai

H.	**Investment of sinking fund**	CAL	MUM	BANG	LUDH	BHOP	LUCK	HYD	CHEN
1	Should be invested in								
(i)	govt. Securities	*	*	*	*	*	*	*	*
(ii)	securities guaranteed by government	*	*	*	*	*	*	*	*
(iii)	fixed deposit with Banks	*	*					*	*
(iv)	debentures issued by another Metro Development Authority	*	*						*
I.	**Attachment of securities for repayment of loans**	**CAL**	**MUM**	**BANG**	**LUDH**	**BHOP**	**LUCK**	**HYD**	**CHEN**
1.	If any money borrowed by the corporation from the state govt. before or after the commencement of this Act, or any interest or costs due, be not repaid according to the condition, govt. may attach the municipal fund or any part thereof	*	*	*	*	*	*	*	*

Note. Cal-Calcutta; Mum-Mumbai; Bang-Bangalore; Ludh-Ludhiana; Bhop-Bhopal; Luck-Lucknow; Hyd-Hyderabad; Chen-Chennai

CHAPTER 3

STRUCTURE AND LEVEL OF CAPITAL EXPENDITURE

The practices of municipal debt financing are greatly influenced by the structure and form of capital expenditure. Traditionally, municipalities are not obligated to invest in many areas of urban infrastructure capital requirements. This is largely due to the size and lumpiness of investments required in these areas of investment, which are largely beyond the resource capacities of many municipal corporations. In the absence of cost recovery considerations, capital investments in infrastructure areas are treated in reality as social services. Owing to these investments and pricing limitations, the functional authorities of municipalities are confined to the distribution of essential services and maintenance of existing capital stocks. The structure and level of capital expenditure at the level of m
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nificant consequences on
the level and structure of capital expenditure at the levels of municipal corporations.

The rapid rate of urbanization, the growing demand for better quantity and quality of urban services, and the realization that public agencies by themselves cannot meet these urban challenges have increased the awareness among urban administrators and policymakers to seek alternative institutional arrangements in the production and provision of urban infrastructure inputs. Related changes in governance and management perspectives have encouraged policy changes to redefine the role of government from "provider" to "enabler".

We have also observed parallel developments in the redefinition of state and local government relationships. Increasing social and political pressures for decentralization, larger acceptance of micro planning and community-based project identification and prioritization processes, greater emphasis on local capacity building and community participation in local governance have contributed to a paradigm shift in the development approach in Indian cities. The 74th constitutional amendment has formalized some of these structures and has paved the way for an increasing devolution of resources and functions to the urban local bodies. Growing demands for better quality of urban services have been continuously testing the "willingness of urban governance" to institute the required policies and instruments. The inability on the part of many states to finance urban development programmes to the required extent has accentuated the process of municipal fiscal and financial autonomy of local governments. In this context, the role of municipal debt as a powerful means of financing long gestation and lumpy urban infrastructure investment gains utmost importance.

In this chapter we shall examine the structure and level of capital expenditure in the 12 municipal corporations between the 1990–91 and 1994–95 period. One of the main objectives is to understand the scope and content of capital expenditure in Indian cities. Another objective addressed in this chapter is to identify the sources of these investments and the role of debt as a means of capital expenditure financing. We shall also attempt to estimate the gross capital expenditure internal resource capacities of these municipal corporations. Since the level and structure of capital investments and their internal resource capacities influence their long term service solvency, this analysis benchmarks the level of capital expenditures in these municipal corporations.

Rationalization of capital expenditure data

From the audited budgets we have observed that capital expenditure data required rationalisation to enable comparison across corporations. While some of the large corporations have maintained well-defined separate capital accounts, corporations such as those of Ludhiana, Lucknow and Bhopal have had a large number of entries in the revenue expenditure accounts that were capital expenditure in nature.[47] In the absence of clear understanding about the structure of capital maintenance and repairs, we have

[47] Capital expenditure is defined as expenditure that adds to the capital stock of the corporation.

re-classified capital expenditure as that expenditure which adds to the capital stock of the corporation. However, expenditures on capital maintenance and repairs, some of which may be lumpy and non-recurring in nature, are classified as revenue expenditures. This rationalization is required for an inter-corporation comparison [48] as well as to assess the internal capacities of local bodies to finance future capital requirements.

Level and structure of capital expenditure

The period between FY 1990–91 and 1994–95 has witnessed significant growth in the level of municipal expenditures in almost all corporations both in the revenue and capital accounts. However, there are wide variations among the corporations not only in the level of capital expenditure but also in the level of total expenditure. It is observed that while Vadodara has spent about 46.56% of the total municipal expenditure in the capital expenditure areas, it was as low as 1.88% in the case of Calcutta during the FY 1994–95 (Table 3.1).

Corporations such as Ludhiana, Vadodara, Jaipur and Chennai have improved their level of capital expenditure during the 1990–91 and 1994–95 period. It is alarming, however, to observe that corporations such as those of Mumbai, Lucknow, Bhopal and Thiruvananthapuram have spent lower percentage of money on capital expenditures.[49] However, in per capita terms all corporations have increased their level of capital spending. The low level of capital spending by some of the corporations such as Calcutta (Rs.5.09), Lucknow (Rs.33.74), Bhopal (Rs.38.36) and Bangalore (Rs.45.57), however, is a matter of concern. We believe that this issue will gain serious dimensions when these corporations will be given the responsibility to build and manage their

[48] One of the consequences of this rationalization is that capital expenditure figures listed in the following table for some of the corporations may not match with the audited budgeted figures. Another important impact of this shift of expenditure from revenue account to capital account will increase the revenue balance of these corporations. Corporations which were not creditworthy prior to these shifts have become creditworthy. Owing to these fiscal implications, we recommend that budgeting systems of municipal corporations and municipalities should be standardised across the country in line with national and state finance accounts.

[49] It may be stated that the delegation of capital expenditure responsibilities between the states and municipal corporations would also influence these shares.

capital requirements in the future. In addition to resource constraints, some of these corporations will face considerable institutional and capacity rigidities in planning and executing capital projects.[50] These are some of the institutional issues which require equal attention in the shifting urban governance paradigm.

Table 3.1 Distribution of Municipal Expenditure , 1990–91—1994–95
(Annual growth rates at constant prices)

Octrol MCs								
Ludhiana	12.74	32.53	35.32	165.05	277.14	507.32	40.03*	32.65*
Mumbai	18.26	15.26	155.26	207.85	850.47	1361.77	0.26	-3.90
Vadodara	14.43	46.56	80.36	658.93	552.72	1415.29	80.35*	73.04*
Jaipur	22.71	38.11	31.10	127.09	136.95	333.52	31.76**	26.1**
Non Octrol MCs								
Lucknow	59.80	29.73	72.40	33.74	121.03	170.23	-15.0	-19.19
Delhi	28.96	32.16	172.25	268.45	594.76	834.79	2.03	-1.81
Calcutta [52]	2.16	1.88	3.72	5.09	172.05	270.52	-1.15	-2.92
Bangalore	14.72	15.56	31.86	45.57	216.37	292.83	5.10	1.52
Bhopal	29.67[53]	18.32	53.78	38.36	181.15	209.32	-18.94	-22.57
Hyderabad	31.85[54]	33.58	54.20	60.33	170.16	179.64	10.34*	9.98*
Thiruvananthapuram	29.92	27.58	55.77	83.98	186.41	304.49	2.09	1.60
Chennai	25.24	45.39	50.20	198.51	198.88	437.31	39.29*	36.07*

Notes. (i) (*) Significant at 1% level and (**) at 5% level, following a semi-log regression estimate with years (t) as the independent variable.
(ii) Constant growth rates at 1980-81 prices
(iii) PC= Per Capita

The level of capital expenditure has grown significantly in real terms in a large number of corporations during the study period. As indicated earlier, significant growth, both in terms of size of capital expenditure and in per capita capital expenditure, have taken place in Vadodara, Ludhiana, Chennai and Jaipur municipal corporations as compared to negative growth in real terms in Bhopal, Lucknow and Calcutta. Perhaps, what is

[50] These are some of the issues reflected by the decision makers during our interviews with them.
[51] Population for the year 1994–95 has been projected based on the 1981–91 population growth.
[52] Terminal year refers to FY 1993–94
[53] Refers to FY 1991–92
[54] Refers to FY 1993–94

equally interesting is to know the factors responsible for the high growth in some of these corporations as compared to negative growth in some others. Since capital expenditures are financed either through internal or external sources, it would be interesting to explore the role of these factors in the capital financing of municipal corporations.

The structure of capital expenditure has also undergone significant changes during the 1990–91 and 1994–95 period. An interesting expenditure pattern emerges from table 3.2. A majority of the corporations with higher levels of capital expenditure have spent most of their funds on urban infrastructure and urban development projects such as water supply and sewerage systems, roads and bridges, improvement schemes and sanitation projects. We have also observed that Calcutta and Bangalore corporations have relatively spent a significant percentage of their funds on municipal building and remunerative projects.

We have observed that as much as 31% of the total capital expenditure during the FY 94–95 was funded through government grants. Some of the main urban infrastructure investments made by the state governments relate to water and sewerage, lighting, roads and bridge sectors. Since the structure of capital expenditure is highly influenced by the functional delegations between the state and municipal corporations, the sectoral share of capital investments varies across corporations. While in some states, state level agencies such as the water supply authorities are responsible for the production and supply of water to the local bodies [55] and the local bodies are responsible for the distribution and collection of water charges or taxes, as the case may be, in others separate city level authorities provide these services.[56]

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[55] For example, the Kerala Water Authority.
[56] For example, the Bangalore Water and Sewerage Board.

Table 3.2 Structure of Capital Expenditure, 1994–95

(Percentage distribution)

Octrol MCs									
Ludhiana	21.56	32.880	8.06	1.32	6.270	5.10	0	0.85	23.95
Mumbai	55.73[58]	19.49	0	1.72	5.27	3.67	2.20	6.16	5.77
Vadodara	31.55	1.21	0.10	0	0	2.33	39.73	12.44	12.62
Jaipur	8.74	11.79	2.03	22.04	1.20	14.47	0.88	0	38.09
Non Octroi MCs									
Lucknow	11.32	39.20	1.71	0	0.81	0	0	0	58.91
Delhi	3.75	22.81		4.42	39.55	0	1.98	00	27.50
Calcutta [59]	11.10	1.37	0.46	84.86[60]	0	0	0	0	2.21
Bangalore	0	0	0	46.86	0	0	0	7.63	8.61
Bhopal	23.21	0	0	0	0	0	0	0	76.79
Hyderabad	0	0	0	0.14	0	0	0	46.89	52.97
Thiruvananthapuram	2.01	26.01	0	0.88	0	0	0	0	71.10
Chennai	4.23	49.07	12.69	16.92	0	0	0	0	11.16

Note. The base year for Bhopal and Chennai is 1991–92.

It is observed that corporations which enjoy higher levels of fiscal autonomy have spent more resources to improve the quality of life and to achieve long-term service solvency. As compared to these decentralized fiscal arrangements, a large number of non-octroi corporations with the exception of Chennai follow a cutback strategy. We may attempt to explore whether the poor level of capital expenditure is due to the absence of internal municipal resource capacities or to concerted efforts to defer capital expenditures.

One of the conjectures in capital investment planning is that the level and per capita capital expenditure and the capacity of local governments to finance such investments are influenced by the size of the corporations. While it is widely acknowledged that larger cities have to incur larger amounts of capital investments, it is not clear whether

[57] Real estate assets include remunerative enterprises and municipal building.

[58] Water Supply and Sanitation Scheme expenditure constituted about 35.12% of the total capital expenditure of the corporation during the FY 1994–95.

[59] Terminal year refers to FY 1993-94

[60] Total amount is spent on municipal buildings.

the per capita availability of capital investments and the internal capacities of the local bodies to finance such projects are related to city size.[61]

Interestingly, we have observed that while the growth in the level of total capital expenditure in real terms is related to population size of cities, in per capita expenditure terms it is not related.[62] This is because smaller corporations such as Vadodara, Ludhiana and Jaipur have succeeded in mobilising significant amounts of revenue to spend on capital expenditures as compared to some of the larger corporations such as Mumbai, Calcutta, Hyderabad and Bangalore. In addition to poor mobilization of resources for capital investments, another factor responsible for the lower level of capital expenditure is the deferral and cutback expenditure policies pursued by some of these corporations.

Table 3.3 Capital Expenditure Incidence, 1994–95
(Per capita in rupees at current prices)

[redacted]

Octroi MCs									
Ludhiana	35.6	54.27	13.30	10.35	8.42	2.17	0	165.05	12.95
Mumbai	115.83	40.50	0	10.95	7.63	3.57	4.58	207.85	149.24
Vadodara	207.87	7.98	0.69	0	15.36	0.11	261.82	658.93	13.30
Jaipur	10.15	14.98	2.58	1.53	18.38	28.01	1.12	127.09	17.84
Non-Octroi MCs									
Lucknow	3.84	9.87	0.12	0.27	0	0	0	33.74	20.43
Delhi	10.08	61.23	0	106.17	0	11.85	5.31	268.45	98.19
Calcutta	0.57	0.07	0.02	0	0	4.32	0	5.09	118.51
Bangalore	0	0	0	0	0	31.75	0	45.57	47.43
Bhopal	8.90	0	0	0	0	0	0	38.36	12.77
Hyderabad	0	0	0	0.14	0	0	0	60.33	53.80
Thiruvananthapuram	1.69	21.84	0	0	0	0.74	0	83.98	5.34
Chennai	8.4	97.41	25.19	0	0	33.59	0	198.51	59.54

[redacted]

[61] A significant amount of literature is available on the cost implications of city size. It is generally believed now that with increasing technological innovations and activity unbundling process, most of the large and lumpy investments, except those with network implications, can now be provided at smaller scales and therefore the infrastructure cost and city size will be a different variant of the classical inverse 'U' cost curve.

[62] While population size and capital expenditure growth are positively related (ß=4.98, ' t' = 4.00 and R^2=0.80), the relationship between per capita capital expenditure and population is insignificant (ß=-0.25, ' t'=-0.207 and R^2=0.06).

[63] Includes water supply and sanitation schemes as well.

[64] Includes remunerative enterprises and municipal buildings.

[65] Projected on the basis of 1981 and 1991 population growth rate.

Table 3.3 supports the view that the levels of capital expenditure in some of the major urban infrastructure sectors are very poor in some of the non-octroi corporations. While the average per capita capital expenditure on water supply and sewerage was Rs.36.74 during the FY 1994–95, it was below the average in majority of the corporations except in the case of Mumbai (Rs. 115.8) and Vadodara (Rs. 207.9). Similarly capital investments in roads and bridges have grown higher in the case of Ludhiana, Mumbai, Jaipur and Chennai [66] during the 1990–91 and 1994–95 period (Chart 1).

Other areas of expenditures which have grown over the years are the improvement schemes and urban development programmes implemented mainly in Delhi and Vadodara. One of the main areas of capital expenditures in Calcutta was the construction of a municipal building. Similarly, the Bangalore Municipal Corporation has invested a large percentage of its capital investment in the construction of remunerative enterprises. Interestingly, Thiruvananthapuram municipal corporation has utilized a large percentage of its capital receipts to advance loans and deposits. The composition of capital expenditure suggests that some of the corporations have spent a large percentage of their capital expenditure on non-infrastructure activities [67] [Calcutta (87.07%), Bangalore (63.1%), Thiruvananthapuram (71.9%) and Hyderabad (100%), Jaipur (60.13%)] at the cost of growth in their economic base and long-term service solvency.

Capital fund flow

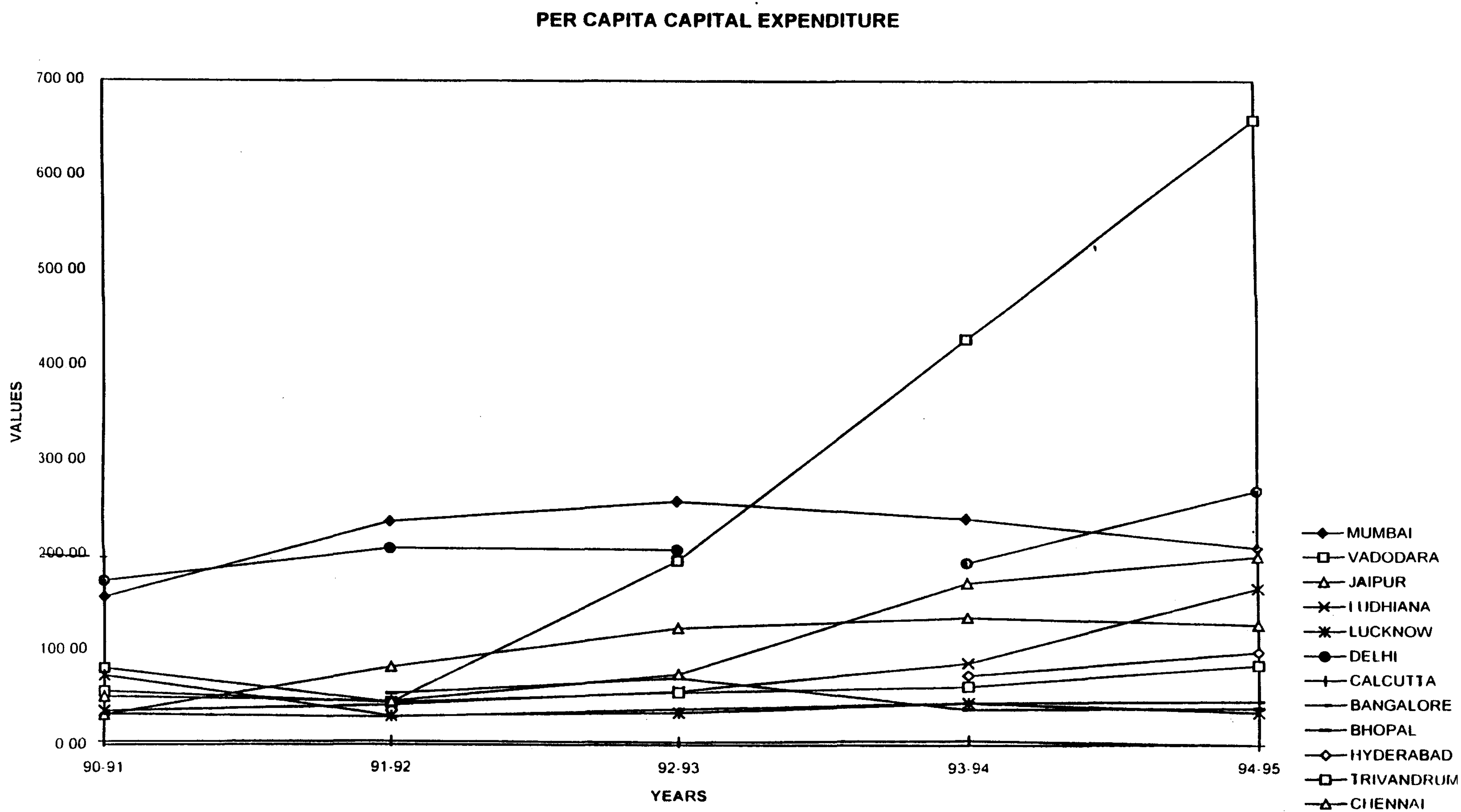
One of the commonly expressed reasons for the inadequate level of capital investment at the levels of local governments was the non-availability of adequate resources with the local bodies to commit themselves for long gestation and heavy investment projects. A review of capital receipts has shown that capital grants and loans from the central government [68] and state government as well as market loans borrowed by the

[66] Per capita capital expenditure during the FY 1990–91 was Rs. 26.32 in Mumbai, Rs. 3.04 in Jaipur, Rs.3.82 in Ludhiana and Rs. 24.45 in Chennai.

[67] Non-infrastructure expenditure includes real estates, deposits and loans and other expenditure not listed in Table 3.2.

[68] We have observed central government grants only in the case of Mumbai Municipal Corporation.

Chart 1


PER CAPITA CAPITAL EXPENDITURE
700 00
600 00
500 00
400 00
300 00
200 00
100 00
0 00
VALUES
90-91
91-92
92-93
93-94
94-95
YEARS
MUMBAI
VADODARA
JAIPUR
LUDHIANA
LUCKNOW
DELHI
CALCUTTA
BANGALORE
BHOPAL
HYDERABAD
TRIVANDRUM
CHENNAI

corporations constitute the major sources of capital financing. While almost all corporations with the exception of Bangalore and Bhopal have received government assistance, market loans constituted one of the main sources of capital financing in Mumbai, Lucknow, Bangalore and Chennai.[69]

Table 3.4 Sources and Growth of Capital Financing, 1990–91, 1994–95 (Percentage distribution)

[redacted]

Octroi MCs									
Ludhiana [72]	30.0	0	0	0	70.0	na	na	na	na
Mumbai	20.25	31.0	7.49	1.18	40.08	10.64	0.20	-3.99	1.89
Vadodara	1.42	8.66	11.52	60.83	17.57	68.78*	52.81*	46.61*	-14.11
Jaipur	10.54	0	0	31.15	58.31	32.82*	20.25**	15.50	-97.64
Non Octroi MCs									
Lucknow	67.84	0	32.16	0	0	6.34	-3.72	-8.47	0.15
Delhi	86.51	13.49	0	0		9.79*	-0.60	-4.35	33.92
Calcutta	0	99.96	0	0	0.04	28.20	15.98	13.89	-27.31
Bangalore	0	0	44.87	0	0	65.96	50.25	45.14	-32.98
Bhopal	0	0	0	0	100	-69.69	-72.32	-73.56	-6612.0[73]
Hyderabad	34.08	0	0	0	65.92	0.49	-5.04	-2.41	-143.01
Thiruvananthapuramm	7.36	1.10	5.42	0	86.09	16.94*	5.87	5.37	0
Chennai	1.43	5.91	89.58	0	0	40.54*	27.23*	24.92*	-323.62

[redacted]

Notes (1) Market loans include open market borrowing, commercial bank loans, institutional borrowing, international agency loans
(2) Internal funds include internal loans, recoveries, own funds, deposits and advances
(3) Government grants include state and central government grants.

Temporal changes in the incidence of capital receipts shown in Table 3.5 suggests that per capita capital revenues in most of the areas have gone up during the 1990–91 and 1994–95 period, but there are significant variations among the corporations. While some of the octroi municipal corporations have succeeded in mobilizing a significant amount of capital (in per capita terms) by means of land sales, a major source of capital finance in the case of non-octroi corporations came from government capital assistance

[69] It should be mentioned here that the cash flows from the loan receipts from the capital receipt accounts need not match the resource flow from the debt / loan accounts. Since the loan accounts reflect the receipt of capital, its utilisation for the various capital projects depend upon the project characteristics.

[70] Other funds include internal loans, advances and loans, recoveries and other receipts.

[71] Capital Balance = capital receipts minus capital expenditure. The balance is shown as a percentage of capital receipts. While a good percentage of the current deficit is met through advances, some of the corporations utilise transfers from the revenue accounts to meet the capital requirements.

[72] Capital receipt estimates are not available. Discussion with municipal corporation officials has revealed that about 70% of the total capital expenditure is funded through municipal funds.

[73] The capital receipt for the FY 1994–95 was Rs.7.3 lac as against an capital expenditure of Rs. 490 lac.

and market borrowing. Chennai is an exception to this pattern and has raised market loans to the extent of Rs.43.43 per capita during the FY 1994–95 as against Rs.5.99 in FY 1990–91 to finance its capital expenditure.

Table 3.5 Per Capita Receipts by Major Sources of Financing, 1990–91, 1994–95

[redacted]								
Octrol MCs								
Ludhiana	na	na	na	na	na	na	na	na
Mumbai	95.61	108.58	5.56	15.86	37.61	68.41	0.28	2.50
Vadodara	13.72	58.20	88.01	66.5	0	89.46	13.38	351.20
Jaipur	1.66	6.78	0	0	9.45	37.51	19.27	20.04
Non Octroi MCs								
Lucknow	22.22	25.40	21.57	12.04	0	0	0	0
Delhi	na	279.52	na	0	na	0	na	0
Calcutta [75]	1.47	4.0	0	0	0	0	0	0
Bangalore	0	0	0	15.37	2.72	18.88	0	0
Bhopal [76]	17.11	0	2.25	0	4.31	0	0	0.57
Hyderabad [77]	40.79	39.82	0	0	13.41	20.58	0	0
Thiruvananthapuram	3.82	7.10	1.65	3.73	45.51	73.15	0	0
Chennai	4.61	3.44	5.99	43.43	0	0	0	0

[redacted]

Note: na = not available

Internal resource for capital expenditure

An important issue which arises in the context of rapid capital expenditure growth during the past years is whether the pace of capital expenditure growth is sustainable within the resources available to the corporations. Table 3.5 suggests that nearly all municipal corporations with the exception of Mumbai, Delhi and Thiruvananthapuram face capital account deficits. Often municipal corporations are forced to execute capital projects on the basis of advances and transfers from internal resources. While the Thiruvananthapuram municipal corporation has balanced its capital account, Delhi has a significant amount of surplus in the capital account. This surplus could be attributed either to the inadequate capacity to implement the committed capital expenditure or due to the problems of funds flows. Even though the case of Delhi could be unique, the

[74] As compared to other municipal corporations, a large percentage of internal fund in the case of Mumbai municipal corporation constitutes interest bearing internal loans.
[75] Terminal year refers to FY 1993–94
[76] Base year refers to FY 1991–92
[77] Base year refers to FY 1993–94

absence of adequate project management capacity at the level of local bodies to identify and implement projects could be one of the issues worth consideration while planning higher capital expenditures by the various municipalities.

A related issue is the gross resource capacities of municipal corporations to address their capital expenditure requirements. Since a large percentage of capital expenditures by some of the corporations are met through transfers from their revenue accounts, the gross internal resource capacities are estimated as the capital receipts obtained by the corporations in the form of capital grants and loans and sale of assets as well as by means of "net free funds" transferable from the revenue accounts.

Table 3.6 Resource Available for Capital Expenditure, 1994–95
(Amounts in lacs of rupees at current prices)

Octrol MCs						
Ludhiana [81]	na	1407	ne	2137	ne	ne
Mumbai	31618	2561	34179	31019	3160	10.18
Vadodara	7679	0 [82]	7679	8763	-1084	-11.95
Jaipur	1148	922	2070	2267	-197	-8.68
Non Octroi MCs						
Lucknow	765	0	765	689	76	11.03
Delhi	27446	0	27446	26359	1087	4.12
Calcutta	466 [83]	0	466	592	-126	-21.28
Bangalore	1625	2654	4279	2161	2118	98.01
Bhopal	7	146	153	490	-337	-68.77
Hyderabad	1339	496	1835	3254	-1419	-43.61
Thiruvananthapuram	448	544	992	448	544	121.43
Chennai	2791	1427	4218	11819	-7601	-64.31

Note : na=not available, ne=not estimated

[78] Presented in Table 5.7 in Chapter 5. We assume that 60 to 70% of the gross operating surplus is available for direct capital investment or leveraging municipal debt. In the absence of city specific data on committed expenditure not met through the current revenue balance, we have based this estimate on a study done by Ferguson & Co., for Bangalore.

[79] Net capital funds is equal to total capital funds (col.4) minus total capital expenditure (col.5).

[80] Capital expenditure resource is defined as net capital funds (+/-) as a percentage of total capital expenditure. While a surplus reflects the additional expenditure capacities, deficit denotes the level of additional capital needs. It also suggests that the percentage of expenditure requires cutbacks.

[81] Capital receipt estimates are not available. Discussion with municipal corporation officials has revealed that about 70% of the total capital expenditure is funded through municipal funds.

[82] Since the gross Revenue Surpluses available for capital financing after meeting the committed expenditure on debt servicing is negative in Vadodara, Lucknow, Delhi and Calcutta municipal corporations these corporations do not draw any surplus from the revenue account. Hence their capital investment capacities are determined by their capital receipts.

[83] For the FY 1993–94.

Table 3.6 suggests interesting capital expenditure capacities across corporations. Even though about 45% of the municipal corporations have additional resource capacities after meeting the present level of capital expenditure, however, Thiruvananthapuram and Bangalore municipal corporations, owing to their poor level of capital expenditure have significant level of internal resources. While Thiruvananthapuram municipal corporation had a balanced capital budget, the internal capacities of Bangalore are much larger than its committed level of capital expenditures. It is estimated that these corporations have additional resource capacities to increase their level of capital expenditure by 121.43% in the case of Thiruvananthapuram and 98.01% in the case of Bangalore. It is reasonable to assume that because of poor levels of committed capital expenditures, both these corporations will post positive gross fiscal balance.[84]

It is also observed that Mumbai, Lucknow and Delhi corporations have additional capacities to increase their capital expenditures by 5–10 percent. However, as compared to these corporations which have additional capacities, corporations such as Chennai, Bhopal and Hyderabad have already committed capital expenditures exceeding their internal resource capacities. Even though capital expenditure cannot be well-balanced with the capital receipts and loan flows, there is evidence to suggest that some of these corporations (particularly Lucknow, Ludhiana, Thiruvananthapuram and Jaipur) follow inefficient project management systems.

One of the main issues which arises in this context is the institutional capacities of the corporations to conceive, plan and execute programmes and projects. Even though the inadequacy of the capital fund is one of the main problems often attributed to the inadequacy of urban infrastructure in the cities of India, a critical problem often overlooked in this context is the institutional capacities of municipal corporations to manage their capital outlays more efficiently. The issue is not one of capital spending

[84] This assumption may look drastic in the face of resource constraints experienced by the urban local bodies. If these municipal corporations post gross fiscal surplus instead of gross fiscal deficit, it only supports the view that the urban local bodies in India either do not have the institutional capacity to implement capital projects or they may be following deliberate capital expenditure cutbacks or deferral policies.

but of capital management. One of the similar arguments explored in the following chapters is whether municipal corporations in India have the institutional arrangements[85] for the effective provision of urban services and the operational systems to manage debt. Based on the capital expenditure performances of some of these corporations, we can assume that a large percentage of municipal corporations follow capital spending and debt repayment strategies rather than capital expenditure management and debt management strategies. These are some of the issues we shall explore in the following chapters.

[85] In the Indian context, there is hardly any research on the relationship between the type of institutional arrangements and the effectiveness in the production and provision of public goods and services at local levels of government. It should be stated, however, that in spite of empirical evidences to show that decentralized urban governance is more equitable and effective in the production and provision of public services (refer chapter 6 for reference), there is a general assumption that since local governments are "creatures of the state" the scope and content of their fiscal authorities are determined by the state. This assumption needs to be reviewed in the context of the 74th constitutional amendment which is aimed to provide more fiscal and financial autonomy to the urban local bodies in India. An important policy issue is whether the unitary system or the decentralized institutional arrangements (either through decentralized administrative procedures or through private sector and community participatory methods) address the objectives of fiscal equivalence and accountability (Robert M Stein, *Urban Alternatives: Public and Private Markets in the Provision of Local Services*, University of Pittsburgh Press, 1990). We have to evaluate the effectiveness of these alternative arrangements while discussing the scope and content of capacity building at the local levels.

CHAPTER 4

STRUCTURE AND INCIDENCE OF MUNICIPAL DEBT FINANCING

In this chapter we shall examine the structure and composition of debt and debt servicing profile of municipal corporations. We have earlier observed that debt does not constitute a significant component of capital expenditure financing in these corporations, except for a few corporations such as Mumbai, Vadodara and Chennai. Moreover, the share of debt in the capital expenditure has experienced a decline over the past five years. Out of the 12 corporations only four have taken loans during the FY 1994–95 to finance capital expenditure. Since the intake of loans during the 1990–91 and 1994–95 period was low, a large portion of capital expenditure was financed through government grants taken by the corporations prior to 1990–91.[86] While the outstanding debt has grown over the past five years, the net annual inflow of debt [87] between the 1990–91 and 1994–95 period has shown a steady decline. However, the debt servicing outflow is comparatively low as compared to the growth in debt obligations. Even though, in debt management practice this high level of debt servicing is a positive trend, since the growth in outstanding debt obligations is more than the debt servicing on an average, some of the corporations are likely to experience debt servicing stress in the future.

Municipal indebtedness

The extent of municipal indebtedness is examined through various measures such as per capita outstanding debt (stock), per capita annual debt (flow), per capita net debt inflow net transfer), outstanding debt as a percentage of tax revenue.[88] Table 4.1 suggests that Mumbai, Vadodara, Delhi and Chennai had the highest level of per capita debt during

[86] Distribution of capital expenditure by sources of funds during the past five years suggests that the intake of loans during this period is far less than the amount of loans utilized for capital expenditure.

[87] Net inflow of debt = annual inflow of debt minus the annual debt servicing (net borrowed resource available with the corporations to fund capital project).

[88] Debt to tax revenue ratio could provide a general interpretation similar to the debt-equity ratio in the commercial accounting system.

FY 1994–95. While the 12 corporation average per capita debt was Rs.332 during FY 1994–95, Mumbai had three times the average debt. The per capita debt of Vadodara has grown nearly three times during 1990–91 and 1994–95. What is more noticeable is the poor level of debt in the rest of the municipal corporations which range from Rs.22.27 in Lucknow to practically *nil* in the case of Hyderabad [89] and Calcutta. Debt financing, except in the case of Mumbai, Vadodara and Chennai, has shown wide fluctuations over the years with large lumpy borrowing in some years interspersed with zero borrowing in some others. The practice of taking loans in tranches is not common among corporations.[90]

It is interesting to observe that the debt raising and debt servicing profile of corporations is not influenced by the practice of octroi tax. While Mumbai and Vadodara corporations use a higher level of debt over the years, other octroi corporations such as Ludhiana and Jaipur did not use their octroi tax advantage to leverage debt. In fact both these corporations have the lowest levels of debt. As compared to these octroi corporations, non-octroi corporations such as Chennai, Bangalore and Lucknow have used higher levels of debt financing.

In comparison with the increase in the outstanding debt in most of the corporations, the additional debt taken during the FY 1994–95 period has come down significantly in almost all corporations, with the exception of Thiruvananthapuram and Chennai. One of the significant patterns in the debt incidence of the corporations is that the debt net flow is negative in all corporations except Thiruvananthapuram (+Rs.3.22) and Chennai (+Rs.33.38) which indicates that the annual debt servicing outflow is larger than the annual inflow of debt. As a result, the average net flow of debt has come down from Rs. Rs.7.75 in FY 1990–91 to Rs.-6.08 [91] in FY 1994–95.

[89] Since Hyderabad municipal corporation did not take any loan since 1983 we may not discuss the loan profile of Hyderabad. However, the corporation is currently in the process of negotiating a loan from HUDCO for about Rs.6 crore for its sanitation programme.

[90] Taking loans in tranches require effective coordination of project planning and financial cash flow analysis. This approach requires a proper debt management strategy which is seldom seen among municipal corporations in India.

[91] This means a per capita outflow of Rs.6.06.

Table 4.1 **Municipal Indebtedness, 1990–91, 1994–95**
(At current Prices)

[redacted]						
Octroi MCs						
Ludhiana	27.27	14.65	0	-9.63	-18.18	9.16*
Mumbai	746.45	983.48	11.88	11.78*	1.11	8.13*
Vadodara	134.91	458.24	5	41.64*	33.63*	6.4
Jaipur	0	8.2	0	5.5*	2.73	18.54*
Non octroi MCs						
Lucknow	2.31	22.27	0	96.74*	78.02*	-10.1
Delhi	250.36	354.96	11.79	13.09*	2.36*	8.16*
Calcutta	0	0.03	0	-	-	-3.58
Bangalore	4.56	22.03	0	69.37*	53.30*	-4.8
Bhopal	1.35	1.17	0	-0.99	-8.74	7.86
Hyderabad	0	0	0	0	0	-31.97
Thiruvananthapuram	7.79	16.83	32.51	18.61*	7.35	1.89
Chennai	166.28	212.26	19.78	7.53*	-2.67	7.31

[redacted]

Note: Net inflow = Loan-debt servicing (capital repayment + interest) during the year.

Table 4.2 **Pattern of Municipal Indebtedness between 1990–91 and 1994–95**
(In Rs. at current prices)

[redacted]						
Octroi MCs						
Ludhiana	0	0	-4.58	-3.08	11.5	3.25
Mumbai	116.86	108.32	44.77	-12.11	168.58	132.92
Vadodara	108.32	22.89	32.79	-154.66	36.92	76.34
Jaipur	0	0	-0.06	-1.18	0	3.54
Non octroi MCs						
Lucknow	0	0	-2.94	-0.2	6.63	75.99
Delhi	44.27	41.86	-13.12	-12.05	132.98	111.05
Calcutta	0	0	-1.27	-3.82	0	0.04
Bangalore	0.28	0	-7.79	-2.49	3.93	16.09
Bhopal	0	0	-0.54	-1.32	4.4	2.65
Hyderabad	0	0	0	0	0	0
Thiruvananthapuram	1.63	5.47	-3.23	3.22	6.53	8.51
Chennai	2.7	41.99	-2.7	33.38	90.25	95.79

[redacted]

The growth profile of outstanding debt suggests that Lucknow, Bangalore and Vadodara corporations have used debt financing more than other corporations during the 1990–91 to 1994–95 period. The debt of Lucknow has grown at an amazing rate of

96.74% (78.02% at constant prices) per annum. In contrast, the outstanding debt of Bangalore and Vadodara has grown at the rate of 69.37% (53.30%) and 41.64% (33.65%) [92] per annum respectively. While these corporations are at one end of the debt spectrum, corporations such as Jaipur, Calcutta and Hyderabad which did not take any loans during this period fall on the other end of the debt spectrum.

What is equally noticeable is the marginal growth in the debt of Mumbai in real terms (1.11%) during 1990–91 to 1994–95 period. Another interesting observation is the negative growth of the debt of Ludhiana and Bhopal corporations. This pattern supports the view that majority of the corporations which have financed their capital expenditure through loans taken during the past years are still in the process of servicing their old debts and often they service the old debt with new debt. This practice provides little scope for managing new debts efficiently. This debt financing practice suggests that municipal corporations in India follow a "debt repayment policy" instead of a "debt management policy".[93]

Another measure of indebtedness is the ratio of debt to tax revenue. We have observed wide variations across corporations in the level of debt as compared to the tax revenue. The debt-tax revenue ratio varied from 1.32 in the case of Mumbai to an insignificant level in the case of Calcutta. A temporal analysis between 1990–91 and 1994–95 suggests that the debt-tax revenue ratio has declined in some of the corporations during this period. However the debt to tax revenue has increased in Vadodara, Lucknow, Bangalore, Thiruvananthapuram and Chennai, suggesting increased levels of debt borrowing.

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[92] Figures in brackets are growth rates at constant prices.

[93] Debt management in this context refers to a debt financing strategy which will yield a positive sum. A positive sum can be obtained only if the future benefits accruing from the utilization of debt are more than the loss incurred by the present generation. This means that net returns from managing the debt should be positive. A loan repayment policy as followed by the corporations at present need not yield a positive sum, because at present loans are not efficiently managed and a majority of the corporations repay old loans with new loans thus experiencing the problem of debt trap.

A comparison of growth profiles of outstanding debt and tax revenue makes interesting study. Municipal corporations which posted higher growth in outstanding debt have experienced lower growth in their tax revenues during the 1990–91 and 1994–95 period. Even though the present level of outstanding debt to tax revenue ratio is a matter of concern, the inverse trends in the tax revenue and debt raise serious doubts on the sustainability of the debt policy of those corporations which use higher levels of debt at present. It seems probable that the lower growth rates in tax revenue, as compared to the growth in debt would compel these debt using corporations either to follow a progressive strategy to enhance their tax and non-tax revenue streams to service new debt or to follow a regressive strategy of availing themselves of new loans to service old debt.[94]

Structure of municipal debt

The distribution of loans taken during the period 1990–91 and 1994–95 indicates that over the years municipal corporations rely more on public institutional agency loans rather than government and open market loans. While the Mumbai municipal corporation has mobilized loans from many sources as compared to other corporations,[95] state loan constituted a major source of financing in Jaipur and Delhi as compared to Bhopal and Bangalore which mainly used HUDCO loans to finance their capital project (Table 4.3).

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[94] See Box 2 for a few basic rules of thumb about government borrowing.

[95] About 55% of the outstanding loan of Mumbai municipal corporation is contributed by interest bearing internal loans and loans from central government. Other corporations did not avail themselves of such facilities. However, Vadodara corporation draws upon a large amount of interest free internal advances to meet its liquidity requirements.

Table 4.3 Structure of Debt during 1990–91 and 1994–95

[redacted]

Octroi MCs										
Ludhiana	0.7	0.4	0	0	80.35	83.4	18.95	16.2	0	0
Mumbai	43.04	15.7	29.01	10.6	0	0	0	0	0	0
Vadodara	22.15	13.9	20.47	16.6	17.55	4.3	22.95	35.8	16.89	16.1
Jaipur	100	99.96	0	0	0	0	0	0.04	0	0
Non-octroi MCs										
Lucknow	100	6.5	0	0	0	0	0	0	0	93.5
Delhi	100	100	0	0	0	0	0	0	0	0
Calcutta	0	0	0	0	0	0	100	100	0	0
Bangalore	0	0	0	0	0	0	100	100	0	0
Bhopal	0	0	0	0	0	0	100	100	0	0
Hyderabad	0	0	0	0	0	0	0	0	0	0
Thiruvananthapuram	31.88	26.2	0	0	0	0	68.12	73.7	0	0
Chennai	52.66	36.7	34.67	28.5	0	0	0	0	9.56	31.6

[redacted]

Note (2) In the case of Mumbai and the Total the remaining percentages refer to Internal Loan and Central Govt. loan

Table 4.4 Per Capita Distribution and Growth of Loan by Sources, 1994–95
(Rs. at current prices and growth rate at constant prices)

[redacted]

Octroi MCs					
Ludhiana	0.05	0	12.22	2.38	0
Mumbai	153.92	104.47	0	0	0
Vadodara	63.71	76.1	19.59	164.25	74.06
Jaipur	8.2	0	0	0	0
Non-octroi MCs					
Lucknow	1.44	0	0	9	20.83
Delhi	354.96	0	0	0	0
Calcutta	0	0	0	0.03	0
Bangalore	0	0	0	22.03	0
Bhopal	0	0	0	1.17	0
Hyderabad	0	0	0	0	0
Thiruvananthapuram	4.42	0	0	12.41	0
Chennai	77.94	60.47	0	0	67.12

[redacted]

A distinct shift in the structure of loans has taken place across municipal corporations over the years. While the share of loans from the state government, the LIC and open market borrowing has decreased over the 1990–95 period, HUDCO loans and loans from the World Bank had registered an exponential growth. These loans had grown approximately at the rate of 50% per annum during this period. While state governments and LIC had reduced their loan contributions to the urban local bodies over these years owing to general paucity of funds and shift in their lending priorities respectively, issues such as the loan guarantee and creditworthiness of the corporations constrained the level of their open market borrowings. Over the years, HUDCO had been more aggressive in developing structures to finance urban infrastructure projects based on their internal worth as well as based on the capacity of the corporations to service debt. We have observed interesting market responsive lending initiatives from HUDCO and newly constituted infrastructure funding agencies.[96] We have also observed that there is an increasing tendency on the part of the corporations to seek World Bank loans for water supply projects. One of the main reasons for the increase in the quantum of bank loans is that the World Bank offers relatively more attractive loan terms and lateral guarantees than provided by the higher levels of governments and eliminates many institutional hurdles involved in mobilizing loans from funding agencies (Table 4.4).

Debt servicing profile

While all municipal corporation acts stipulate the constitution of sinking funds as a method to service debt, only four corporations, i.e. Mumbai, Vadodara, Chennai and Bangalore, use the sinking fund structure while the remaining corporations use the general fund (corporation fund) to service their debts. As compared to other corporations, we have observed a different arrangement in the case of Bhopal where the State Government of Madhya Pradesh has been deducting Rs.13 lac yearly from the octroi compensation grants due to the corporation against the repayment of state loans.[97]

[96] HUDCO and some of the other financing agencies such as the ILF & S do not insist on state guarantees if the borrowing agencies can produce bank guarantees. It should be noted that one of the implications of these market responsive lending policies is an increase in the rate of interest. A 10 -year HUDCO loan could cost in the range of 17–20% rate of interest per annum depending upon the purpose of the loan.

[97] Even though this type of debt servicing is not widely practised, we observe that this could be a potential method of debt servicing in the context of increased devolution of functions and resources from the state to urban local bodies and the implementation of the "pooled" grant fund concept. We shall discuss the debt planning potentials of state transfer at a later stage.

It is necessary to state that the practice of keeping a separate loan account as a part of the capital budget as in Mumbai, Vadodara and Chennai has helped these corporations to monitor the funds flows and the utilization and management of debt more efficiently than others. Similarly, corporations which use the sinking fund arrangements for debt servicing have been able to monitor their debt management more easily than other corporations which use the general fund method. However, none of these corporations use project specific sinking funds and as a result the inflows and outflows of funds to the sinking fund cannot be related to the efficient management of specific debt. This calls for appropriate debt servicing arrangements at the level of municipal corporations. It is therefore recommended that the sinking fund arrangement could be restructured to specific projects and enhanced by assigning either a fixed percentage of total corporation fund or by assigning specific taxes sufficient enough to service the required debt.

One of the constraints experienced by the corporations in managing sinking funds is the limitation imposed by the state on the investment of sinking fund accruals. Until recently, the scope for investing the surplus from the sinking fund was limited to short term (45 days) government securities. Liquidity constraints, interest mismatch between loan and deposit and poor accounting and financial management systems are some of the reasons for lack of enthusiasm on the part of the corporations to strengthen the sinking fund structure for debt repayment.

Recent policy changes to permit the corporations to invest the sinking fund surplus in medium term commercial bank deposits is one of the measures in the right direction. It is also observed from our discussions with local officials that the introduction of a double entry accounting system with a separate loan account and providing more freedom to the corporations to commercially manage their sinking fund surplus are some of the policy measures worth consideration.

The debt servicing profile suggests that about 75% of the debt repayment constitutes the interest component. The share of interest in the total debt servicing has gone up during the 1990–91 and 1994–95 period in the case of Mumbai, Delhi and Bangalore, whereas in the case of Vadodara the share of interest came down from 70 % to 53% during this period. A number of corporations defer the capital repayment and what is more alarming is that a good percentage of them even face difficulties in the repayment of interest. One of the noticeable patterns is that inverse trends in the growth of debt and debt servicing and tax revenue suggest debt servicing stress service in the case of Vadodara, Delhi, Lucknow, Bangalore and Thiruvananthapuram corporations (Tables 4.1 and 4.5). The wide variation in the levels of per capita debt-servicing across municipal corporations suggests different levels of debt servicing obligations and levels of performance (Charts 2 and 3). As compared to an increase in the level of debt outstanding, these corporations have posted a decrease in the debt servicing, particularly the interest repayment over the years.[98] This pattern should be a matter of concern for the sustainability of debt financing of these corporations.

Table 4.5 Debt Servicing Profile, 1990–91 and 1994– 95
(Rs. per capita at current prices)

Octroi MCs								
Ludhiana	30.22	23.95	51.58	39.03	5.61	-4.40	9.679	-0.71
Mumbai	76.20	123.37	85.15	90.08	20.31*	1.11*	20.72*	9.27*
Vadodara	75.53	177.55	70.25	53.85	29.54*	17.25*	23.96*	12.19*
Jaipur	0.69	3.12	100	100	41.83*	28.37	68.05	52.11
Non octroi MCs								
Lucknow	2.94	0.2	93.2	65.11	-53.85*	-58.23*	-60.04*	-63.82*
Delhi	57.39	53.9	46.68	49.43	3.72	-6.11	5.80	-4.12
Calcutta	0	0	0	0	0	0	0	0
Bangalore	8.07	2.49	14.85	61.88	-9.51	-18.09	9.29*	-1.06
Bhopal	0.54	1.32	100	100	34.88	22.09	34.88	23.14
Hyderabad	0	0	0	0	0	0	0	0
Thiruvananthapuram	4.91	2.25	100	100	na	na	-17.35*	-25.47*
Chennai	5.4	8.61	100	100	na	na	18.81*	7.54

Note: In the case of Thiruvananthapuram and Chennai separate interest repayment details are not available,

na = Not available

Since separate data on capital repayments are not available for Thiruvananthapuram and Chennai, debt servicing is taken as interest repayment.

(*) denotes significance at 1% level

[98] Ironically, Bangalore and Thiruvananthapuram municipal corporations have the highest levels of debt servicing capacities. This supports the view that debt servicing capacities and debt servicing efficiencies are not related owing to poor debt management practices.

Chart 2

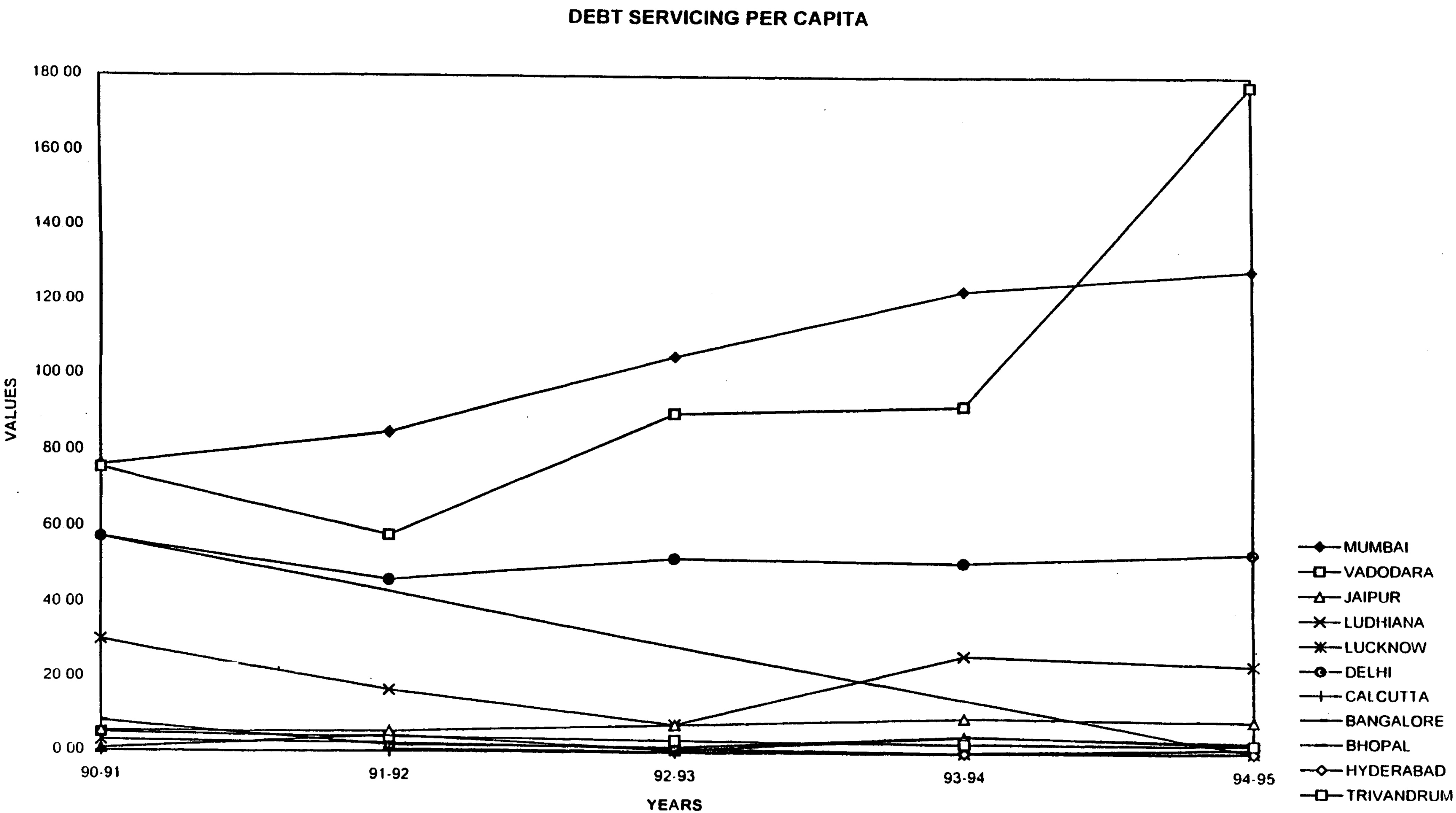
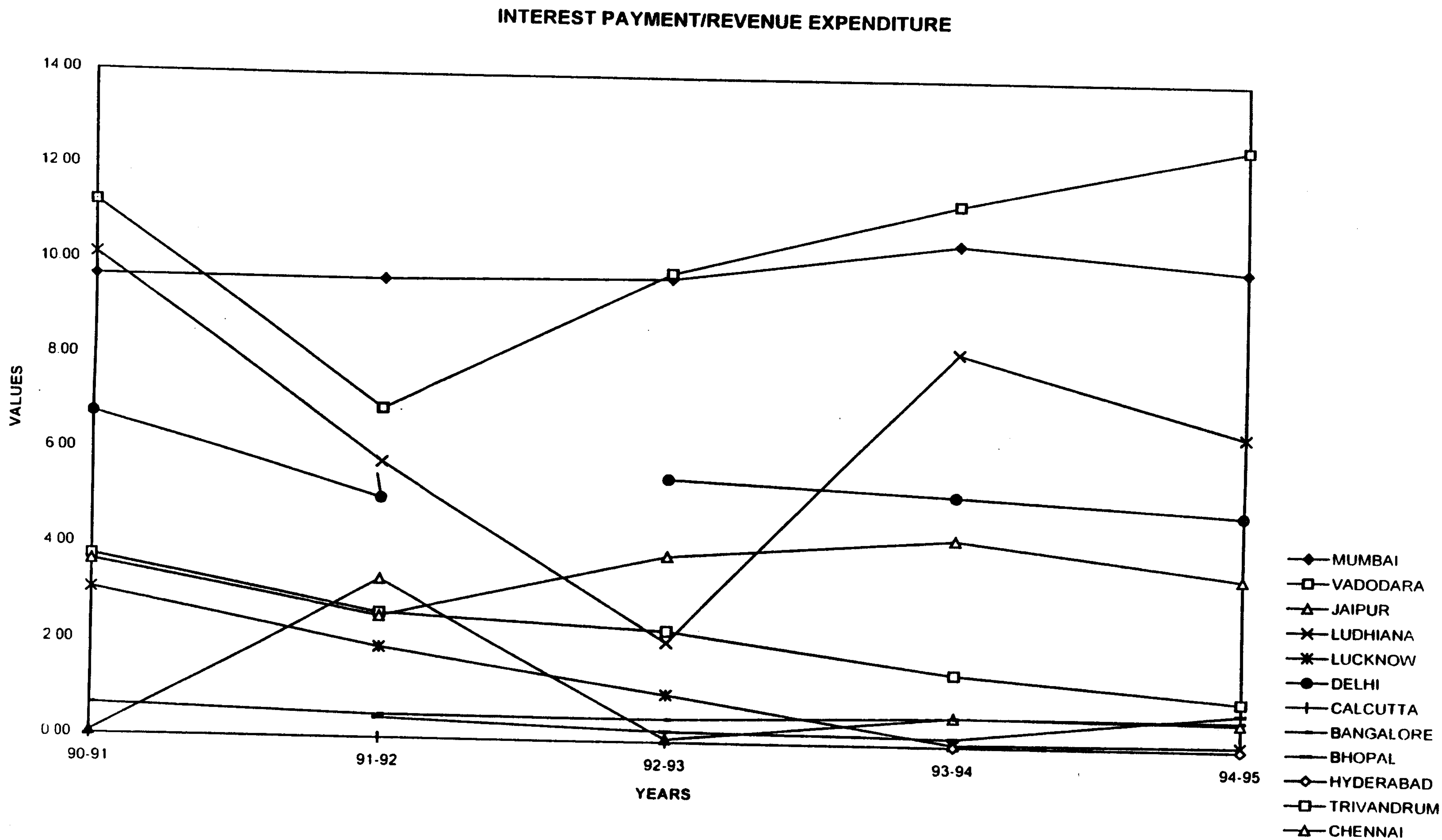

DEBT SERVICING PER CAPITA
180 00
160 00
140 00
120.00
100 00
80 00
60 00
40 00
20 00
0 00
VALUES
90-91
91-92
92-93
93-94
94-95
YEARS
MUMBAI
VADODARA
JAIPUR
LUDHIANA
LUCKNOW
DELHI
CALCUTTA
BANGALORE
BHOPAL
HYDERABAD
TRIVANDRUM
CHENNAI

Chart 3



INTEREST PAYMENT/REVENUE EXPENDITURE
14 00
12 00
10.00
8.00
6 00
4 00
2 00
0 00
VALUES
90-91
91-92
92-93
93-94
94-95
YEARS
MUMBAI
VADODARA
JAIPUR
LUDHIANA
LUCKNOW
DELHI
CALCUTTA
BANGALORE
BHOPAL
HYDERABAD
TRIVANDRUM
CHENNAI

Debt servicing stress

The debt servicing stress and debt servicing potential are examined with the help of a large number of measures. While the structure of debt servicing stress is examined through measures such as debt service ratio (DSR), debt service burden ratio (DSBR), interest service ratio (INT/RE), debt servicing capacities are examined through measures such as debt service coverage ratio (DSCR) and debt service as a percentage of total own revenue (DS/OR) of the corporations. Measures such as DSR, INT/RE provide indications of the debt servicing stress and related liquidity stress from the revenue account perspective. Since in the case of some municipalities a certain portion of the debt servicing is paid through the capital account, the DSBR indicator would supplement the debt servicing stress perspective by taking into consideration the total expenditure of the corporations.

On the other hand DSCR captures the internal resource capacity of the corporations to repay debt and the DS/OR indicates the financial independence of the corporation to repay loans from own resources. While a higher DSCR would suggest a higher debt servicing capacity of the corporation, a higher DS/OR would suggest relatively less maneuverability on the part of the corporation to finance capital expenditure from own resources (Table 4.6).

Box 2
Rules of Thumb about Government Borrowing

The difficulties about foreseeing the effects of a given loan made to a government probably help to explain why simple rules of thumb are sometimes used to decide whether a government's debt or borrowing appears to be excessive. It is often argued that if the rate of increase in a government's borrowing exceeds the rate of interest it has to pay on its borrowing, that is an unsustainable position; on the ground that if this continued the debt would eventually rise without limit. It is also true that if the total of the government's debt rises faster than the country's total output (income in the case of local governments), that position is (ultimately) unsustainable, as the debt servicing would eventually come to exceed the total output (Budget Deficits and Macro Economic Policy, Perkins J O N, Macmillan Press, 1997).

Table 4.6 Measures of Debt Servicing Stress, 1990–91 and 1994–95

Octori MCs								
Ludhiana	12.50	7.00	2.11	7.54	10.90	4.72	4.99	6.59
Mumbai	10.96	11.18	1.77	1.28	8.96	9.47	13.86	10.07
Vadodara	15.99	23.47	0.94	1.03	13.67	12.55	28.51	12.64
Jaipur	0.65	1.51	7.37	25.29	0.50	0.94	1.14	0.57
Non octroi MCs								
Lucknow	3.28	0.15	2.10	-53.29	2.43	0.02	0.41	0.10
Delhi	13.58	9.52	-0.05	0.01	9.65	6.46	16.02	4.71
Calcutta	0	0	0	0	0	0	0	0
Bangalore	4.37	1.01	3.13	33.55	3.73	0.85	1.28	0.62
Bhopal	0.42	0.63	80.47	14.31	0.30	0.77	1.78	0.77
Hyderabad	0	0	0	0	0	0	0	0
Thiruvananthapuram	3.76	1.02	7.78	66.74	2.64	1.11	0.80	1.02
Chennai	3.60	3.61	0.30	5.98	2.73	1.97	3.23	3.61

Notes:
(1) Debt Service Ratio (DSR) = Debt Servicing as a percentage of total revenue expenditure
(2) Debt Service Coverage Ratio (DSCR) =Operating Surplus before interest + amortization as a multiple of debt servicing
(3) Debt Service Burden Ratio (DSBR)=Debt servicing as a percentage of total expenditure
(4) DS / OR = Debt Service as a percentage of total own revenue
(5) INT / RE = Interest payment as a percentage of revenue expenditure
(6) In the case of Thiruvananthapuram and Chennai the distribution between capital repayment and interest repayment is not available. We have therefore taken this as the interest repayment.

Table 4.6 highlights an interesting debt servicing stress profile. The temporal analysis of debt servicing stress variables suggests that with the exception of Mumbai and Vadodara corporations, almost all the others have reduced their levels of debt servicing during the 1990–91 and 1994–95 period. While the DSR of Mumbai has increased from 10.96% in FY 1990–91 to 11.18% in FY 1994–95, it has increased from 15.55% to 23.47% during the same period for Vadodara as against an average DSR of 8.66% in FY 1994–95. Noticeable fall in the debt servicing is observed in the case of Delhi, Bangalore, Ludhiana, Lucknow and Thiruvananthapuram corporations. A similar pattern is also observed in the case of the DSBR variable. These debt servicing profiles suggest that corporations such as Chennai, Delhi, Bangalore, Lucknow and Thiruvananthapuram are likely to post an increase in their levels of debt obligations in the future if they continue to raise the same level of debts followed by lower rates of debt servicing.

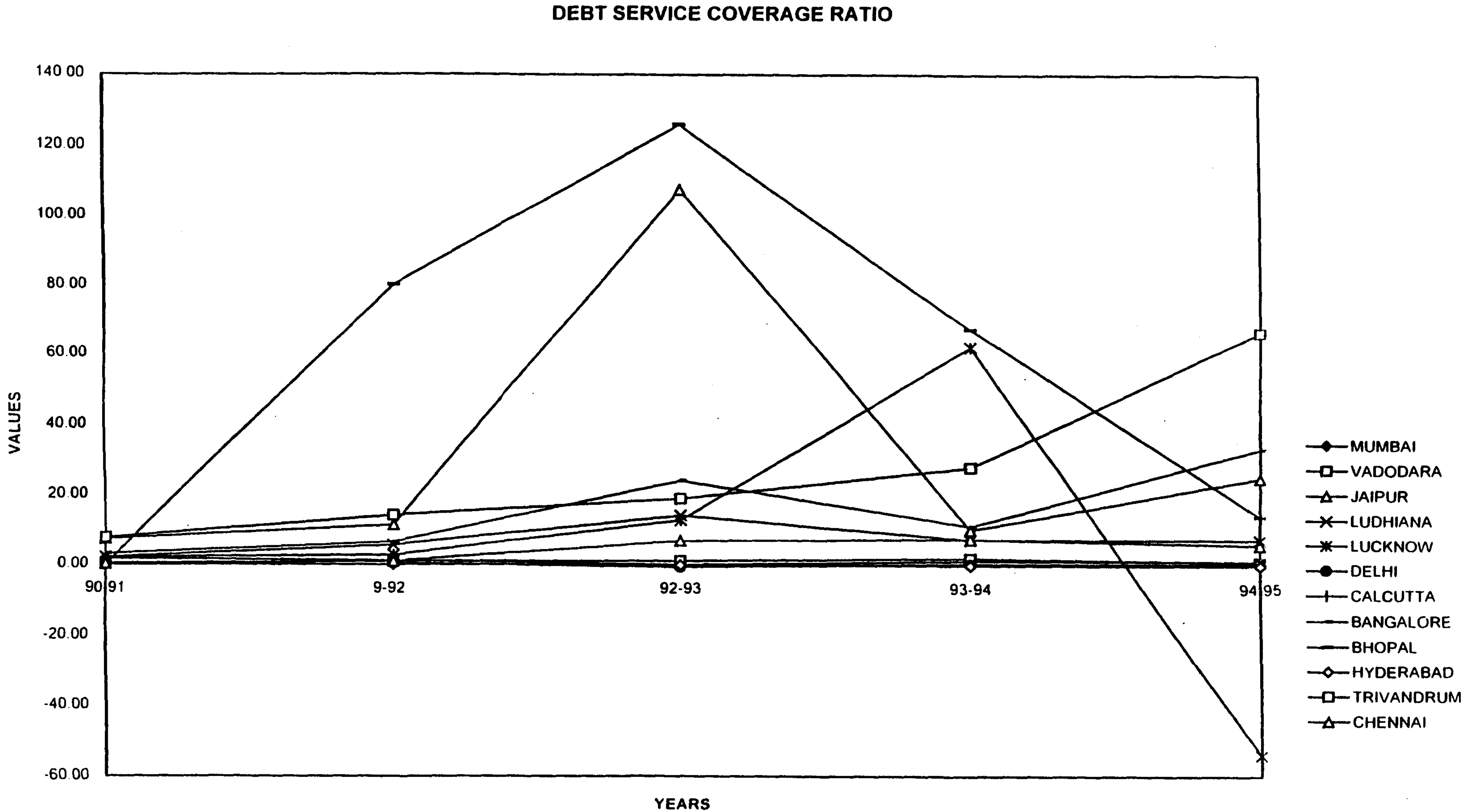
Since more than 75% of the debt servicing is comprised of interest payments, the large share of interest payment in the revenue expenditure in the case of Vadodara, and Mumbai (about 11%) signals the threshold limits for debt servicing. It should be noted that debt leveraged corporations such as Mumbai and Vadodara have been able to post reasonable levels of revenue surpluses during the FY 1994–95 inspite of their high debt servicing liabilities. However, the high level of debt servicing as compared to the own revenue resources – as much as 28.51 percent in Vadodara, 13.86 percent in the case of Mumbai and 16.02% in the case of Delhi, suggest the threshold resource limits of these corporations to leverage further debt without depending on external transfers from higher levels of governments. From the experiences of Mumbai and Vadodara we assume that a DSR of 10–12 percent is manageable if the municipal finance is properly managed.[99]

As compared to the debt servicing profile of corporations, analysis on their internal capacity to service debt (DSCR) manifests a different pattern. Some of the corporations which use relatively less debt at present have a significant amount of internal capacities. Since the present level of debt is far less as compared to operating surpluses in Jaipur, Bangalore and Thiruvananthapuram corporations, these corporations have high DSCR in the range of 65 to 50. In comparison, the DSCR of corporations which use higher levels of debt as in the case of Mumbai, Vadodara and Chennai are in the range of 1–6. Since Calcutta Municipal Corporation was in deficit it has experienced a negative DSCR (Chart 4). Due to the wide variation in the operating surpluses posted by the corporations we have observed that the level of internal capacities of corporation to service additional debt vary widely over time. On an average we could say that over the years municipal corporations have improved their internal capacities. The level of operating surplus is determined by the increase in the resources as well as by cutbacks

[99] This understanding about the ideal DSR is only a conjuncture at present. Detailed comparative analysis is required to arrive at a reasonable city average.

in municipal expenditure. However, it is noticeable that the improvements in the internal resource capacity of some of the corporations are not reflected in their debt management. Since the amount of operating surplus "free" for capital investment is influenced by these factors, we shall examine these issues in more detail in the following chapter.

Chart 4


DEBT SERVICE COVERAGE RATIO
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
-20.00
-40.00
-60.00
VALUES
90-91
9-92
92-93
93-94
94-95
YEARS
MUMBAI
VADODARA
JAIPUR
LUDHIANA
LUCKNOW
DELHI
CALCUTTA
BANGALORE
BHOPAL
HYDERABAD
TRIVANDRUM
CHENNAI

CHAPTER 5

FISCAL HEALTH AND DEBT CARRYING CAPACITY OF MUNICIPAL CORPORATIONS

Fiscal health is a qualitative concept and it means different things to different people. Depending upon the objectives, various fiscal health and fiscal stress indicators have been developed.[100] Basically, fiscal health indicators have three potential uses. First of all these indicators provide early warnings on the fiscal health of municipalities. Credit rating by agencies on the financial and fiscal health of the corporations provides some part of these early warnings. Even though one may question the adequacy of these ratings, these exercises do provide interesting insights on the financial performance of the agencies. Secondly, fiscal health indicators are useful for better financial management of the corporations. Measures for the structure and level of debt and debt servicing capacities of the corporations are useful for the efficient management of their assets and liabilities. And thirdly, fiscal health indicators enable the government to formulate efficient grants-in-aid programmes and a transfer policy to redress the vertical and horizontal fiscal imbalances.

The main objective of this chapter is to help understand the resource capacity and buoyancy of the revenue sources of the corporations to manage their committed expenditures. Another equally important objective is to examine the level of municipal internal resource capacities to leverage market borrowing for additional capital investments. Even though there are no commonly acceptable criteria of fiscal and financial health of municipalities, we shall attempt to construct a few indicators. The financial indicators shall provide the basis for developing a financial monitoring system for these corporations at a later stage. Since the "long term service solvency" related indicators should be constructed over a long period of trend data, the scope of the indicators provided in this chapter is limited. Basically, these indicators enhance the awareness of municipal administrators and politicians in regard to the financial health of the corporations and related fiscal and financial management problem areas. A related issue being explored in this section is the frictional effect of these additional debt borrowings on the tax and non-tax incidence of these municipal corporations. These effects will suggest the fiscal sensitivity of debt servicing.

Fiscal health management options

The issue of fiscal health of local bodies has been widely discussed in the urban finance and development literature and various hypotheses for the turnaround of the local economies have been proposed. Broadly, these approaches could be grouped as:

- the improving economy thesis;
- the increasing resources thesis; and
- the deferral and cutback management thesis.

While improving the economy thesis reasons the fiscal affliction of local bodies to the decline in their economic base, the increasing resources thesis and cutback management thesis are based on the fiscal arrangements and functional management systems with the local bodies. Even though all these approaches are related to one another, the improving economy thesis is considered external to the fiscal management systems of local bodies. If local economies are stagnant or undergoing recession, loss of job and income reduce the availability of resources to them. It also puts pressure on their social service expenditure. Since these factors are influenced by macroeconomic policies, it is considered external to the operational and management parameters of local bodies. The fiscal management of municipal bodies is largely discussed within the increasing resource mobilization and expenditure control framework of urban fiscal management. In the following sections we shall therefore discuss "the increasing resources thesis" and "deferral and cutbacks thesis" in more detail.

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[100] Some of the serious attempts to construct fiscal health indicators in US were, The Fiscal Conditions Index by the Brookings Institute, US Congress, 1978, Touche Ross and Co. Index, 1979, Urban Fiscal Monitoring Index by the Urban Institute 1978.

The increasing resources thesis

The increasing resources thesis argues that the main reason for the poor quality of life in cities and towns in the developing world is lack of adequate resources at the disposal of local bodies to provide the essential urban services and economic infrastructure to the population. It is argued that the mismatch in the elasticity of resources and expenditure is one of the main reasons for poor fiscal health of the local bodies. The prescription is one of increasing the tax and non-tax sources, improving their collections as well as increasing the transfers from the central and state governments. One of the main sources of capital expenditures in majority of the urban local bodies in India is government transfer either in the form of plan and non-plan grants. The main objective of the transfer from states to local bodies is to redress the vertical and horizontal fiscal imbalances. In spite of the many decentralization guidelines proposed by the Finance Commissions, state transfers are not necessarily governed by these socio-economic criteria. These are some of the issues emphasized by the State Finance Commissions [101] in their recommendations to devolve resources and functions to the local governments in India.

Structure and Growth of Municipal Resources

Analyses of the structure of revenue and their changing pattern over the past five years across the municipal corporations shows interesting pattern. Revenue from taxes constituted more than half of the total revenue in almost all municipal corporations, with the exception of Lucknow (23.35%), Bhopal (23.47%), Bangalore (34.24%) and Calcutta (36. 43%) during FY 1994–95. Interestingly while the share of tax revenue in the remaining eight municipal corporations has increased during FY 1990–91 and 1994–95, the share of tax revenue in the above mentioned four corporations has decreased during the same period. A reduction in tax revenue in these corporations is not mitigated by an increase in the non-tax revenue but by an increase in grants and

[101] Narayanan Edadan, Devolution and Fiscal Effects of Local Bodies, *Financial Express*, March 7, 1997.

transfers from states, resulting in a reduction in the internal own resource capacities of these corporations.

Table : 5.1 Structural Changes in Revenue Streams, 1990–91, 1994–95 (Percentage Distribution)

Octroi MCs								
Ludhiana	12.86	13.95	13.9	16.76	86.07	79.4	0.03	3.84
Mumbai	7.42	6.77	21.83	17.23	57.34	60	20.83	22.77
Vadodara	12.21	10.58	3.95	2.96	78.13	78.79	17.92	18.25
Jaipur	7.45	8.7	6.14	14.68	81.84	81.93	12.02	3.39
Non octroi MCs								
Lucknow	17.85	20.62	8.23	15.78	37.48	23.35	54.29	60.87
Delhi	41.74	46.47	2.47	3.29	52	62.27	45.53	34.44
Calcutta	35.28	31.11	10.5	11.55	42.62	36.43	46.88	52.02
Bangalore	36.27	26.16	22.67	25.03	52.78	34.24	24.55	40.73
Bhopal	14.05	15.37	23.49	15.94	34.24	23.47	42.27	60.59
Hyderabad	22.74	20.48	37.77	33.99	42.38	56.04	19.85	9.97
Thiruvananthapuram	15.63	15.61	13.4	23.1	72.78	53.65	13.82	23.25
Chennai	35.67	32.25	13.18	15.83	82.26	78.67	4.56	5.5

The importance of property tax as a major source of revenue varies across municipal corporations based on their resource base and collection performance. The share of property tax [102] varies from as low as 6.77% in Mumbai to as high as 46.47% in Delhi. Contradictory to the general belief, the share of property tax has not increased in virtually any corporation with the exception of Jaipur, Lucknow, Delhi and Bhopal. Increase in the share of property tax in these four cities, however, was marginal. One of

[102] The base tax is sometimes referred to as the general property tax. While in some of the corporations the base tax includes the house tax, water and conservancy (sewerage and sewerage benefit) tax, in some others these are clearly demarcated in the budgets. The general property tax in Jaipur, Ludhiana, Lucknow, Delhi, Calcutta, Bangalore, Bhopal, Hyderabad, and Chennai include water and conservancy taxes. Hence city comparison of property tax even at this level of disaggregation should be attempted with caution. While the municipal corporation acts stipulate the house tax band from 15% to a maximum of 27%, the water and conservancy tax rates are not governed by these statutes. There is an increasing trend on the part of the corporations to levy higher levels of property related service tax. It is not surprising, therefore, that there is a cumulative tax burden on immovable property ranging from 60% to 100% (Chelliah Committee on Tax Reform, NIPFP, 1996).

the reasons for this poor performance of property tax is the inadequate tax collection and enforcement. [103]

An interesting trend in the changing pattern in the revenue structure of these corporations is an increase in the importance of non-tax revenue. The share in this has improved in Ludhiana, Jaipur, Lucknow, Bangalore, Thiruvananthapuram and Chennai. In the context of increasing utilization of debt financing, this improvement in the share of non-tax revenue should be viewed positively.[104]

Comparison of tax and non-tax incidences suggests that while octroi constitutes the major source of tax in octroi municipal corporations, Mumbai has the highest non-tax revenue per capita, while Delhiites pay the highest level of general property tax.[105] The per capita property tax ranges from Rs 26 in the case of Lucknow to as high as Rs 239 in Delhi. Interestingly, the per capita property tax in octroi municipal corporation is also higher than other corporations, which supports the view that octroi tax is not treated as a substitute for property tax and a better collection of octroi tax only enhances the resource capacity of local bodies.

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[103] Most of these corporations have reached the legally permitted property base tax limits. In the context of increasing public opinion on the high level of property tax, the only feasible strategy available to these corporations is improved collection through strict enforcement strategies and legal measures. The recent experiences of Ahmedabad and Surat municipal corporations are worth noting. These corporations have improved their investment capacities by three fold during the past two to three years as a result of doubling their property and octroi tax collections. Computerised accounting and legal enforcement and strict backtracking strategies have been successfully used by these corporations. It is observed that the administrative decentralisation implemented in these corporations is one of the main instruments for this fiscal turnaround (Narayanan Edadan, *Urban Governance and Capacity Building*, Overseas Development Agency (mimeo), 1997).

[104] There is an increasing awareness of financial autonomy among the local bodies and the institutional approach to debt financing is undergoing positive changes. The belief that successful management of debt demands efficient service pricing as well as special purpose vehicles for debt servicing such as the creation of debt servicing funds or assigning a percentage of revenue from the corporation fund to a separate escrow account. Efficient exploitation of non tax revenue sources is considered as one of the best instruments for managing future resource requirement of local bodies.

[105] This general property tax includes water and related conservancy taxes as well.

Table 5.2 Municipal Revenue Incidence, 1994–95
(Per capita at current prices)

Octroi MCs									
Ludhiana	396	70	322	84	19	499	23.41*	11.71*	5.83*
Mumbai	725	81	512	205	139	1191	17.76*	6.58*	2.16
Vadodara	600	81	435	23	123	761	17.45*	6.31*	2.00*
Jaipur	231	25	206	41	9	282	30.89*	18.47*	13.33*
Non octroi MCs									
Lucknow	29	26	-	20	72	126	12.57*	1.91	-3.11
Delhi	320	239	-	17	53	513	13.22*	2.49	-1.3
Calcutta	87	74	-	28	90	238	10.96*	0.45	-1.35
Bangalore	112	86	-	82	134	328	14.10*	3.29	-0.21
Bhopal	44	29	-	30	114	189	7.30**	-2.04	-6.4
Hyderabad	74	27	-	45	13	133	7.27*	-3.55	1.67
Thiruvananthapuram	198	58	-	85	86	368	20.11*	8.74**	8.0
Chennai	222	99	-	45	16	282	20.43*	9.02*	12.19

Note: (*) Significant at 1% level and (**) at 5% level
Growth rates are in annual percentages

The growth analysis [106] of revenue suggests that the incomes of Ludhiana, Jaipur, Thiruvananthapuram and Chennai corporations have increased significantly during the past five years. In real terms, even the incomes of Mumbai and Vadodara corporations have grown above the average. As expected, revenues of octroi municipal corporations have shown increasing buoyancy as compared to non-octroi municipal corporations. The negative growth in the per capita revenue of corporations such as Lucknow, Delhi, Calcutta, Bangalore, Bhopal and Hyderabad suggests that their long-term service solvency and resource capacities to leverage debt financing shall come under immense pressure unless and until these corporations are able to enhance their resources through efficient tax administration and enforcement.

Table 5.6 presents the growth pattern of property tax, non-tax revenue and total tax revenue of corporations over the past five years. It is observed that while the growth of

[106] Growth trends are estimated by using the exponential growth equation, transformed as semi log regression equation with "t" (years) as the independent variable.

total revenue in octroi corporations is largely due to increase in their octroi collections, higher property tax and non-tax revenue accruals in Ludhiana and Jaipur corporations have equally contributed to their higher revenue growth. Interestingly, growth in non-tax revenue has improved in a large number of corporations except in Bhopal, Vadodara and Mumbai. The observed pattern is that while octroi corporations have relied more on octroi and property tax sources of revenue, non octroi corporations have relied more on on-tax revenue sources.[107] It is observed that there is significant scope in enhancing the property tax proceeds of some of these corporations either through more efficient tax collection or by exploiting non-tax revenue sources through better fiscal innovations.

A review of the resource base of these corporations as well as through discussions with municipal officials reveal that two important areas of buoyant revenue sources are not exploited adequately. At present not enough attention is paid to institute user charges for services that are inappropriately subsidized by the property tax and where unit cost is relatively easy.[108] Another area of revenue stream which requires more attention from the corporations is to generate more money from the efficient management of municipal assets and revenue surplus. Since the scope of managing operating surplus is associated with the overall cash and liquidity positions of the corporations, it is essential that appropriate financial structures are instituted in this area of financial management.

The expenditure cutback management thesis

Increasing fiscal pressures have forced many local bodies in the West to take stock of their expenditure streams to implement socially responsive but economically efficient expenditure management and control systems. Expenditure cuts are largely instituted in three main areas; cuts in administrative overhead expenditure (employee compensations

[107] The significant increase in octroi revenue through privatization of collection services by the Jaipur Municipal Corporation indicates emerging trends in institutional arrangements in fiscal management.
[108] There is increasing awareness that services such as water supply and sewerage should be priced more efficiently. However, the political will to apply user charges to recover costs and to take legal actions against those who use illegal means to access these services are found lacking.

and collection charges),[109] maintenance cuts of existing capital stock and deferred capital expenditure.

In the absence of efficient administrative and management systems, municipal corporations in India have been following cutbacks in maintenance of capital stock and new capital investments. However, rationalization in the administrative expenditure is long overdue. Even though many corporations have not been recruiting employees through the direct recruitment route, political sensitivity does not enable them to rationalize certain areas of services, since these rationalization exercises invariably lead to the layoff of employees. Since wage increase in local bodies directly or indirectly is influenced by the state employment laws,[110] municipal corporations in India have little choice either to cut employees or to rationalize their wage bill.[111] In this context, the most common option which municipalities adopt is to defer capital investment and maintenance of capital stock.

Structure and growth of revenue expenditure

The structure and growth of revenue expenditure in municipal corporations are influenced by the municipal corporation act statutes on obligatory and discretionary functions. Since the functions delivered by these corporations are different, their comparison should be done with caution.[112] Wide variations in the areas of functions have impacted in the wide range in the level of expenditure incidence. While the per capita revenue expenditure of Mumbai municipal corporation was Rs 1,154 in FY1994–95, it was as low as Rs 119 in Hyderabad. With the exception of Delhi, the expenditure capacities of corporations with octroi tax are larger than non-octroi corporations.

[109] This is mainly influenced by the services provided by the local bodies.
[110] While a majority of the municipal corporations are empowered to recruit and institute wage compensation according to their own laws, municipal corporations and even municipalities in Kerala are governed by the State employment laws. Local bodies in Kerala face serious fiscal stress since they are forced to pay salaries and compensation to their employees according to the State laws.
[111] The options available with the urban local bodies in India are limited. One of the main obstacles for work and compensation rationalizations are the strong labour unions.
[112] In the following chapter we have discussed the coefficient of variation to capture these issues involved in the comparative analysis.

Another area of caution required while comparing the expenditure pattern relates to the comparison of administrative and collection expenditure. While some of the corporations following different budgeting systems, either as a separate profit centre [113] or accounts [114] apportion administrative costs and overheads across various budgets, in majority of the corporations these expenditures are pooled under the general administrative expenditure head.[115] It is observed from table 5.3 that the general administrative and collection expenditure constitute the major expenditure in Ludhiana (54.82%), Bhopal (69.71%) and Chennai (54.76%) in FY 1994–95, where as it is as low as 3.84% in Delhi. However, it is interesting to note that the share of administrative expenditure has not shown any significant increase over the past five years.

One of the areas of expenditure which has improved its share during the FY 1990–91 and 1994–95 period is the maintenance and repair expenditure on water supply and sewerage capital stock.[116] Even though the per capita expenditure in this activity is very large in Mumbai (Rs317), Calcutta (Rs118) and Vadodara (Rs114) and *nil* in the case of Chennai and Jaipur,[117] Lucknow had spent as high as 43.74% of its total revenue expenditure in this sector during the FY 94–95. Table 5.3 also suggests that municipal corporations have not been able to reduce their level of expenditure significantly in activities in the revenue account. It seems, therefore, reasonable to assume that expenditure management controls are not practised in any municipal corporation as a

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[113] The Bombay Electric Supply & Transport Undertaking budget of the Mumbai municipal corporation is a separate profit centre and thus its administrative and overhead expenditures are not clubbed along with the general administration expenditure of A (General Budget), B (Slum Improvement Budget) and E (Education Budget) in Mumbai municipal corporation.

[114] It is also observed that sector specific accounting is not well structured in many corporations. While in some corporations all administrative expenditures are posted in the general administrative head, in some other corporations these are posted in the sector expenditure itself. This explains the low percentage of administrative expenditure of the Delhi corporation.

[115] This is one of the areas of budgeting and accounting reforms required at the local levels.

[116] We have undertaken a comprehensive review of capital expenditure accounting done in the budgets. While maintenance and repairs on capital expenditure are retained in the revenue expenditure, all additional capital investment listed in the revenue expenditure (which would have been financed through revenue income) have been shifted to the capital expenditure account. This rationalization is found necessary for inter-corporation comparison purpose. Therefore, revenue expenditure estimates given in the budgets of some of the corporations will be different from our estimates.

[117] In both these municipal corporations, water supply and sewerage are the responsibility of separate water and sewerage authorities.

fiscal strategy. On the contrary, revenue expenditure in almost all corporations have grown significantly during the study period.

Table 5.3 Structural Changes in Revenue Expenditure Pattern, 1990–91, 1994–95
(Percentage distribution across major heads)

[redacted]										
Octroi MCs										
Ludhiana	61.17	54.82	10.13	6.59	0	0	0	0	1.4	4.46
Mumbai	6.9	7.55	9.68	10.07	15.22	15.24	12.99	12.68	18.71	18.88
Vadodara	23.46	23.31	11.23	12.64	2.56	2.32	16.95	14.61	10.93	13.11
Jaipur	12.67	15.73	0.06	0.57	76.49	60.71	0.24	0	0	0
Non octroi MCs										
Lucknow	17.45	13.85	3.06	0.1	1.72	1.37	2.91	2.46	57.61	43.74
Delhi	3.83	3.84	6.34	4.71	16.79	13.59	24.45	23.76	1.19	1.77
Calcutta	18.06	17.4	0	0	5.73	5.55	3.67	3.14	23.65	23.28
Bangalore	9.05	14.37	0.65	0.62	7.05	7.89	4.57	5.11	5.36	7.92
Bhopal	77.49	69.71	0.42	0.77	2.55	2.52	0	0	7.34	10.77
Hyderabad	14.68	19.16	0	0	37.01	37.66	1.14	1.18	0.3	1.38
Thiruvananthapuram	13.67	13.57	3.76	1.02	10.52	12.86	0.26	2.11	8.87	7.72
Chennai	59.63	54.76	3.65	3.61	0	1.92	0	0.1	0	0

[redacted]

Table 5.4 Municipal Expenditure Incidence, 1994–95
(Per capita in Rs. at current prices)

[redacted]									
Octroi MCs									
Ludhiana	187	25	29	15	0	342	15.38*	4.45*	-3.50
Mumbai	87	116	108	317	176	1154	18.74*	7.47*	3.01*
Vadodara	176	53	53	114	18	756	15.21*	4.28**	0.05
Jaipur	32	1	19	0	125	206	25.47*	13.56*	8.60*
Non octroi MCs									
Lucknow	19	0.13	30	60	2	136	14.91*	4.03	-1.10
Delhi	22	27	66	10	78	566	11.89*	1.306	-2.50
Calcutta	55	0	31	118	18	319	17.34*	6.23*	4.32**
Bangalore	36	2	79	20	20	248	7.918	-2.31	-5.60
Bhopal	119	1	0	19	4	171	15.248*	5.21*	0.49
Hyderabad	23	0	45	2	45	119	8.56*	-2.39	-7.49
Thiruvananthapuram	30	2	67	7	28	221	12.93*	2.23	1.75
Chennai	131	9	62	0	5	239	13.02*	2.31	0.053

[redacted]

Note: (*)Significant at 1% level and (**) at 5% level
Growth rates are in annual percentages.
PC revenue growth = Per capita revenue growth

However, a comparison of the growth profile of municipal revenue and expenditure suggests that most corporations, except for Bhopal and Hyderabad, have been able to mobilize revenue at higher rates than the growth in their expenditures. The growth pattern of per capita expenditure and revenue reveals that Jaipur and Chennai have been able to balance their revenue generation and expenditure spending. It is alarming however to find that the long term expenditure solvency of Vadodara and Ludhiana is likely to come under serious pressures in the future if these corporations do not improve their fiscal positions either through resource enhancement or expenditure cutbacks.

It is alarming to note that in many non-octroi corporations (Lucknow, Delhi, Calcutta, Bhopal and Hyderabad) growth rates of revenue and expenditure did not keep up with the changes in population growth. These corporations have experienced negative growth rates in per capita revenue and expenditure in real terms. However, Bangalore corporation showed a shift in this pattern. While the total revenue of Bangalore has grown at the rate of 14.2% per annum at current prices, its expenditure in the revenue account has grown only by 7.9%, suggesting possibility of significant operational surplus. However, the issue which requires serious attention is whether the operating surplus posted by many corporations is a net saving; net free funds available for debt servicing after meeting the committed expenditure is a moot question which requires further examination.[118]

Revenue and expenditure buoyancy

One of the issues that often draws the attention of fiscal policymakers relate to the buoyancy of revenue and expenditure. There is a general impression that the property tax revenue has saturated in rate revisions and the only alternative available with local fiscal planners is to improve the collection and tax enforcement. It is also argued that future revenue buoyancy of municipalities is based on the fiscal innovations to mobilise non-tax revenue sources. Another assumption often pointed in the revenue expenditure side is that administrative overhead expenditure is one of the main areas of expenditure contributing to the expenditure bill of the municipalities. Under the assumption of labor redundancy, often expenditure management experts suggest a cutback in administrative expenditures. Since the scope for fiscal management is influenced by the potentials to raise revenue capacities as well as to cutback and manage expenditures, an examination

[118] A financial management study done by Ferguson and Company for the Bangalore municipal corporation suggests that at least 30-40% of the operating surplus is not "free" for capital financing.

of the buoyancy structures becomes inevitable. This is attempted by estimating the revenue and expenditure elasticities for various sources of revenues and expenditures.

Using a double log model of the regression analysis,[119] the following elasticities are estimated.

Table 5. 5 Results of Tax and Expenditure Buoyancy Analysis

PT	21.88	0.81	0.04	0.86	56
NTR	33.11	0.80	0.07	0.71	56
ADE	7.76	0.95	0.09	0.67	56
INP	630.95	0.46	0.05	0.69	44
WSS	144.54	0.62	0.07	0.64	42
RBR	75.85	0.71	0.06	0.75	43
PUH	147.91	0.38	0.06	0.68	49

Note: Significant at 1% level

The empirical estimates given in table 5.5 brings out interesting results of the buoyancy analysis. It could be noted that all variables are significant. While changes in both property tax and non-tax revenue significantly explain changes in the total revenue receipts of the corporations, expenditures on administrative overheads, interest repayments, roads and bridges, water supply and sewerage and public health sectors explain the highest level of variation in the level of total revenue expenditure.

119 The generic version of the regression model could be given as

$$\log Y = \alpha + \beta \log X \,;$$

Where: Y = Total Revenue Receipt (TRR)

X varies from PT = Property Tax

NTR = Non Tax Revenue

In the case of Expenditure Model

Y = Total Revenue Expenditure (TRE)

ADE = Administrative Overhead Expenditure

INP = Interest repayments

WSS= Water Supply and Sewerage

RBR= Roads and bridges

PUH= Public Health

The above model is estimated across a 5 year series of data for each of these variables.

This analysis suggests that fiscal management approaches should simultaneously address revenue mobilization and expenditure management comprehensively in order to improve the fiscal health of corporations. Contrary to the belief, the analysis suggests significant level of buoyancy. Property tax still is the main source of revenue for the municipal corporations. Similarly, total revenue is very sensitive to changes in non-tax revenues. On the expenditure side, changes in administrative expenditure influences changes in the total expenditure of the corporations. The analysis therefore calls for a comprehensive fiscal management approach of resource mobilization and expenditure management to improve the fiscal health of the municipal corporations.

Internal resource capacity

Revenue balance of municipal corporations has shown large fluctuations over the past five years. During the FY 1994–95, only three out of the twelve municipal corporations have posted revenue deficit.[120] While Lucknow, Delhi and Calcutta have posted revenue deficit ranging from 33.83% to 8.72% of the operating income, Thiruvananthapuram, Bangalore and Jaipur have posted significant revenue surpluses ranging from 40.14–26.85 percent. However, the revenue balance pattern was different during FY 1990–91 in which year corporations such as Vadodara, Delhi, Calcutta and Chennai have posted revenue deficit (Table 5.6). This high fluctuation in the internal capacities of these corporations influence the structure and form of their fiscal health. It is clearly seen that these resource fluctuations render the fiscal health of these local bodies very unpredictive (Chart 5).

[120] Even though municipal corporation statutes do not demand surplus budget, almost all corporations strive to adjust their books to post operating surplus.

Chart 5

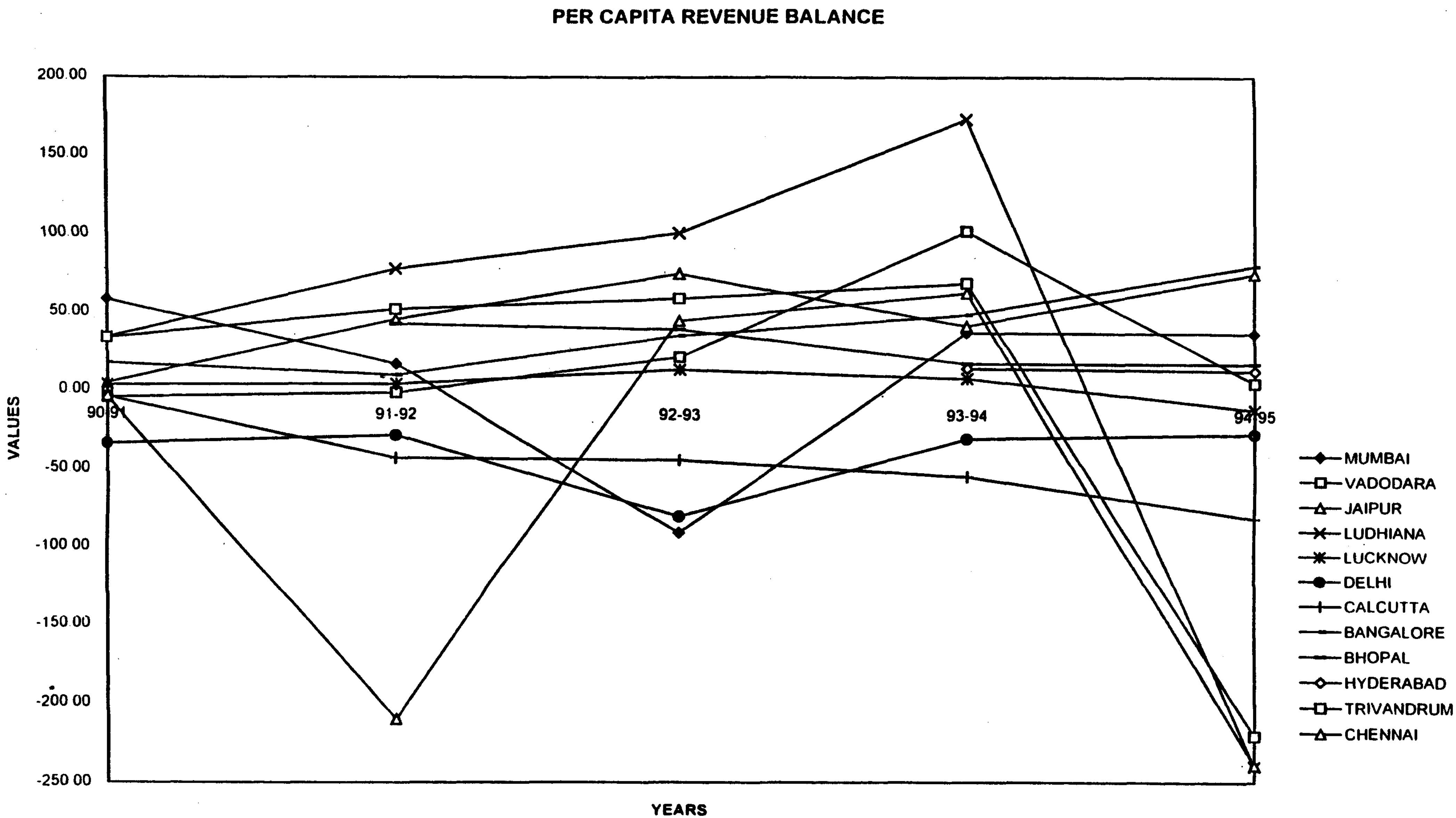
PER CAPITA REVENUE BALANCE
200.00
150.00
100.00
50.00
0.00
-50.00
-100.00
-150.00
-200.00
-250.00
VALUES
90-91
91-92
92-93
93-94
94-95
YEARS
MUMBAI
VADODARA
JAIPUR
LUDHIANA
LUCKNOW
DELHI
CALCUTTA
BANGALORE
BHOPAL
HYDERABAD
TRIVANDRUM
CHENNAI

Table 5.6 Operating Balance and Revenue Growth Pattern, 1990–91, 1994–95
(Annual percentage growth at constant prices and per capita operating balance in Rs at current prices)

[redacted]							
Octroi MCs							
Ludhiana	33.82	156.66	12.27	31.4	15.03*	5.78**	20.44**
Mumbai	58.43	37.31	7.75	3.13	4.31**	8.13*	0.85
Vadodara	-4.59	5.47	-0.98	0.72	0.95	6.84*	-2.53
Jaipur	4.39	75.77	3.98	26.85	24.47*	18.54*	44.57*
Non Octroi MCs							
Lucknow	3.26	-10.95	3.51	-8.72	1.69	-10.01	15.77*
Delhi	-60.47	-52.99	-16.70	-10.32	6.52**	8.17*	9.63
Calcutta	-3.91	-80.56	-2.38	-33.83	-2.81	-3.59	3.56*
Bangalore	17.25	80.9	8.55	24.65	-0.89	-4.8	4.48
Bhopal	42.63	17.63	25.08	9.35	-2.33	7.86	-12.12
Hyderabad	14.35	13.17	11.01	9.94	-13.13	27.54	-13.19[121]
Thiruvananthapuram	33.31	147.87	20.32	40.14	4.03	1.89	24.2**
Chennai	-3.8	42.85	-2.62	15.22	8.34*	7.31	18.67*

Note. (*) Significant at 1% level and (**) at 5% level

Four municipal corporations (Ludhiana, Jaipur, Bangalore and Thiruvananthapuram) rank high in terms of revenue surplus indicators such as the per capita revenue surplus and revenue surplus as a percentage of revenue income.[122] Since corporations keep a statutory surplus to cover at least one month's overhead expenditure and they defer non administrative expenditures in order to balance their budgets, we cannot assume that the operating surplus is fully available for debt financing or capital investments.[123]

Fiscal and Financial Indicators

Some of the fiscal and financial indicators of the corporations presented in Table 5.7 suggest that debt financing is not a major source financing capital expenditures in majority of the corporations. While 50 percent of the corporations have spent more than

[121] Refers to FY 1993–94 and 1994–95

[122] It should be mentioned here that according to the audited budgets, Ludhiana posted operating deficit during the FY 1994–95. Since a large percentage of revenue expenditure are capital expenditure in nature, after the expenditure rationalization exercise under taken by us, operating balance of this corporation became surplus.

[123] A recent study done by Ferguson and Company for Bangalore has observed that at least 40% of the revenue surplus was due to cutbacks on committed expenditure.

30 percent of their total expenditure on capital investments during the FY 1994–95, a high percentage of these expenditures is financed from own fund and have thus retained lower revenue surpluses.[124] It is also interesting to note that the level of market debt financing in some of the corporations with high internal resource capacities is low. As discussed before in an earlier chapter, while the DSCR [125] of Thiruvananthapuram (66.75), Bangalore (33.55) and Jaipur (25.29) are significantly high, these corporations have neither resorted to significant debt financing nor invested these surpluses efficiently. What is more alarming is that these corporations have posted lower rates of debt servicing as compared to their intake of debts. It should be stated here that in spire of these remarkable levels of operating surpluses these corporations have resorted to capital expenditure cutbacks and have performed less efficiently in their debt management. The main conclusion that emerges in this context is that inspite of posting huge revenue surpluses by some of the corporations, their level of capital expenditure and expenditure on common services are poor,[126] thus raising concerns on the long-term service solvency of these municipal corporations.

It is also necessary to note that the highly debt leveraged corporations such as Mumbai and Vadodara and Delhi have utilized their internal revenue capacities reasonably well and they need to improve their fiscal efficiency in order to leverage more debt. This calls for a fiscal strategy which simultaneously mobilizes more resources as also manages the expenditures efficiently. One area where Vadodara requires more attention is to rationalise its high level of per capita municipal employees.

[124] In contrast, Delhi which had a operating deficit of 10.32% had spent 32.15% of its total expenditure on capital investment.
[125] Debt Service Coverage Ratio.
[126] This is revealed by the low level of per capita revenue and capital expenditures (Tables 5.4 and 5.7) of the surplus corporations.

Table 5.7 Fiscal and Financial Indicators, 1994–95
(At current prices)

Octori MCs						
Ludhiana	6.59	32.53	5.79	14.65	99.60	7.54
Mumbai	10.07	15.26	2.77	983.48	84.3	1.28
Vadodara	12.64	46.56	9.71	458.24	86.10	1.03
Jaipur	0.57	38.11	5.29	8.2	0.04	25.29
Non octroi MCs.						
Lucknow	0.1	3.98	3.05	22.27	93.5	-53.97
Delhi	4.71	32.15	4.07	354.96	0	0.017
Calcutta	0	1.89[127]	3.63	0	0	ne[128]
Bangalore	0.62	15.56	2.89	22.03	100	33.55
Bhopal	0.77	18.30	4.70	1.17	100	14.31
Hyderabad	0	33.64	2.23	0	0	ne
Thiruvananthapuram	1.02	27.55	3.37	16.83	73.8	66.75
Chennai	3.61	45.39	4.70	212.25	63.3	5.98

Debt Carrying Capacity

One of the commonly used indicators of fiscal capacity of municipal corporations to leverage market borrowing is the operating surpluses.[129] Owing to high fluctuations in the operating surpluses observed in these corporations, it is difficult to assume that the operating income and expenditure streams have been stabilized. Table 5.8 therefore, provides two alternative estimates for the debt carrying capacities [130] of these local bodies. While one is based on 3-year averages, another is based on the FY 1994–95 estimate.[131]

Debt servicing capacity estimates based on the 3-year averages as well as those based on the 1994–95 estimates are within reasonable ranges, except in the case of Mumbai municipal corporation. This is because of the huge revenue deficit experienced by the corporation during the FY 1992–93. While the corporation had posted an operating surplus to the tune of about Rs5,250 lac during the 1993–95 period, it has incurred a huge deficit of Rs12,388 lac during the FY 1992–93, thus pulling down the average

[127] Refers to FY1993–94
[128] Not estimated due to zero-debt servicing
[129] Often the DSCR is taken as the basis for estimating the debt servicing / carrying capacity.
[130] The debt servicing / carrying capacities are defined in gross terms. Refer Table 3.6 in Chapter 3 for an estimate based on net internal funds free for capital financing.
[131] These estimates are not projected for a future period.

significantly. This deficit during the FY 1992–93 should be considered as an outlier. Therefore, based on a two-year average the debt carrying capacity of Mumbai municipal corporation was to the tune of Rs3,485 lac as on 1995.

Table 5.8 Debt Carrying Capacity as on 1995
(Figures in lacs at current prices)

[redacted]

Octrol MCs						
Ludhiana	165.05	27.52	4.99	na	1533	2010
Mumbai	207.85	48.75	13.86	2076.8	-17592 (3485)[134]	3658
Vadodara	658.93	89.92	28.51	na	-1003	-1017
Jaipur	127.09	89.46	1.14	na	1056	1317
Non octrol MCs						
Lucknow	33.74	32.16	0.41	47.2	50	-225
Delhi	268.45	0	16.02	na	-9181	-7531
Calcutta	5.09[135]	0.04	ne	137.7	-6947	-9547
Bangalore	45.57	100	1.28	na	2417	3792
Bhopal	38.36	59.34	1.78	2270.9	291	208
Hyderabad	60.40	34.08	ne	na	720	708
Thiruvananthapuram	83.98	91.54	0.80	2799	476	777
Chennai	198.51	92.66	3.23	430	2433	2039

Note: Internal capacity for additional debt servicing = Gross Revenue Surplus (before interest payments) minus Debt Servicing. Since the actuals to committed expenditure ratios for all corporations are not available we have used the "gross free funds", instead of "net free funds" concept. However, it is observed that while in some of the corporations the actual to budgeted ratio is about 70%, it is more than 100% in some other corporations. This is a good indication of the unscientific budgeting procedures followed by these local bodies as well as the unpredictability in the finances of the municipalities in India.

Table 5.8 summarizes the debt carrying capacities of municipal corporations. It is rather alarming to observe that Vadodara which was one of the fiscally healthy municipal corporations has reached its internal fiscal limit in terms of debt servicing capacity. The operating surplus of the corporation has not grown to match with its debt servicing requirements. It is suggested that the Vadodara municipal corporation should improve

[132] Capital expenditure funded through municipal funds include all sources of revenue other than central and state government grants and loans.

[133] Gross debt carrying capacity as defined in this table takes into considerations only the debt servicing obligations of the revenue balance. However, the net free fund available for capital financing could be in the range of 65–70%.

[134] The estimate is based on two-year averages.

[135] Refers to 1993–94

its resource raising capacities and attempt expenditure management and controls before committing itself to future debt obligations. The high employee-population ratio of Vadodara is another indication for its high administrative overheads and therefore the need to rationalise its revenue expenditure.

The above estimates suggest that except for Vadodara, Lucknow, Delhi and Calcutta municipal corporations, the remaining corporations have reasonable levels of debt servicing capacities. The DSCR also supports this observation. As compared to other corporations, Thiruvananthapuram, Bangalore and Jaipur stand out in terms of their internal capacities to leverage more debt.

Fiscal effects of debt servicing

A different aspect of debt financing problem which dominated the public finance literature on national debt and which is very relevant in the case of local bodies is the issue of fiscal burdens of debt. A commonly prevailing contention is that debt financing burdens the future generation more than the present one. Based on the perspectives in which this issue is examined, this can be both an argument and a critique for debt borrowing.

The contention advanced by the opponents of debt financing (deficit financing) [136] is that the burden of all public expenditures eventually falls on the tax payer, with loan finance merely delaying the tax payments until the debt is repaid. The burden is thus postponed to future generations who have to handle the accumulated debt obligations. Since debt repayments become a part of the country's claim structure, only interest payments create additional tax requirements.

Another argument offered was that such interest payment would impose no burden on future generations since the future generation would contain both taxpayers and interest

[136] Even though deficit financing is a well accepted source of financing at the national level, it is still viewed with caution at the local government level.

receipts. This argument is based on the "we owe to ourselves" perspective. This argument was correct in that interest payments involve no loss of resources to the group as a whole, but it overlooked the "frictional effect of taxation". The severity of such effects is likely to rise with the overall level of taxation or the ratio of tax revenue to the total income of local governments. As the ratio of market debt to total income of the local government increases, the ratio of the tax revenue or the non-tax revenue to total revenue required to service the debt also increases. Based on the issue of the debt liability and recourse structures for debt repayments, the "tax-disincentive" problem emerging from the frictional effect of taxation becomes serious. As long as the debt does not increase more than the growth in the income of the local government, the debt to income ratio does not rise and debt servicing should not be a matter of concern.

The frictional effects of local debt are influenced by their structures. The frictional effects of taxation should influence the fiscal policy if local debts are financed through general obligation bonds. In the case of general obligation bonds, debt servicing is made either from the general municipal fund or through a special purpose vehicle arrangement in the form of a debt servicing fund by assigning specific taxes or a percentage of the income from the municipal fund. In these circumstances, debt servicing burdens impact the general taxpayers.

On the other hand when the local debts are financed through revenue bonds debt servicing of which is made from the revenues generated by the project, or through special purpose vehicles, debt servicing is done through user charges and direct pricing of services. In this case there will be no inter-generational effects of debt servicing, because the debt servicing burdens fall on those who directly benefit from the consumption or use of such services.[137]

However, owing to the general purpose nature of capital investments at the local level, the problem of intergeneration equity arises most seriously at the levels of local

[137] This type of debt servicing is based on the theoretical construct of the "benefit principle".

governments. Lumpy capital investments such as water supply and sewerage and township developments impose large tax burdens on the local population. As noted earlier, one of the major sources of revenue on which some of the corporations base their debt financing is octroi. In the event of octroi abolition and inadequate octroi compensation grants, the debt repayment burdens will fall on general taxes, particularly the property tax.[138] An understanding of these fiscal effects of debt servicing is therefore essential before deciding on the structure and level of debt in sub-national governments.

Table 5.9 Frictional Effects of Taxation [139]

Octroi MCs						
Ludhiana	3.08	8	0.25	37.73	18.10	17.01
Mumbai	82.00	11.89	8.88	69.76	15.65	26.61
Vadodara	63.00	13.13	7.64	86.85	18.22	10.60
Jaipur	2.90	8	0.23	82.16	8.93	14.91
Non octroi MCs						
Lucknow	17.73	14	2.42	25.77	23.04	18.20
Delhi	69.12	16	9.96	71.81	57.55	13.25
Calcutta	0.00	13	0.00	36.43	31.11	11.55
Bangalore	6.7	17.75	1.17	35.41	27.35	26.20
Bhopal	0.62	8	0.05	23.52	15.42	15.99
Hyderabad	0.00	0	0.00	56.04	20.48	33.99
Thiruvananthapuram	4.57	14.8	0.67	64.32	16.28	23.77
Chennai	75.35	14	9.54	83.21	44.79	25.27

[138] Recently formulated Proposition 13 of California stipulates that the local government should take prior approval from the citizens before introducing any debt borrowing from the market.

[139] The tax rate 't^*' required to finance interest is given by

$$t^* = idY/(Y+idY) = id/(1+id)$$

Where:

i= interest rate,

d= ratio of debt to corporation income Y,

The estimates show that the need to finance interest payments *could* compel these local bodies to absorb substantial share of the local economy's taxable capacity towards debt servicing and thereby displace other outlays.

[140] Average rate of interest across all the outstanding debts of the corporations.

The fiscal effects of debt servicing [141] as presented in Table 5.9 suggest that some of the debt leveraged corporations such as Mumbai, Vadodara. Delhi and Chennai have significant level of interest repayment obligations. There are basically three options available with the corporations to arrange such repayments. The repayments could be made through an increase in the general taxes including octroi, property tax, etc. or specifically through increases in property tax, or through an increase in non taxes such as user charges, fees, etc. The fiscal effects on each of these arrangements are shown by the increased contributions expected from these sources of revenue.

The scope for general and property tax increases in the highly leveraged corporations is limited. These corporations however, can exploit the non-tax revenue sources to service future debt repayments. However, corporations such as Ludhiana, Lucknow, Calcutta, Bangalore and Bhopal have additional tax capacities to generate more income and leverage debt in the future. Even though these corporations could rely more on the property tax as their main source of revenue, there is significant scope to increase other tax and non tax sources to leverage additional debt servicing. In general there are significant scope to increase the contribution of non-tax revenues in most of the corporations and these sources of income could be leveraged successfully against debt financing, provided there are the required institutional and financial systems.

Municipal fiscal solvency

While some of the above listed indicators reflect the operational health and debt servicing capacities of municipal corporations, their long term fiscal solvency is more adequately reflected by the level and changes in the gross fiscal deficit. Since gross fiscal positions of municipal corporations reflect own resource (internal) capacities to meet their total expenditure requirements, it is one of the good indicators on the fiscal position and financial solvency (creditworthiness) of these agencies. As hypothesized in

[141] This analysis assumes a theoretical debt repayment structure. The tax effect of debt servicing refers to the total interest repayment obligations on the outstanding debt. Even though it is desirable to make prompt repayment of interest on the total outstanding debt, local bodies do not practise such arrangements. However, it is desirable to consider total interest repayments to estimate the fiscal effects.

the earlier section on capital expenditure capacities (Chapter 3), it is evident from Table 5.10 that Thiruvananthapuram and Bangalore had fiscal surpluses in the FY 1994–95 and had significant amounts of internal resource reserves to increase their levels of expenditure; both capital and revenue. Both these corporations are fiscally healthier than their respective states.

Table 5.10 Gross Fiscal Deficit, 1990–91, 1994–95 [142]
(Values at current prices)

[redacted]						
Octroi MCs						
Ludhiana	0.55	1.63	1.51	8.39	1.6	433
Mumbai	12.85	14.32	96.83	170.54	2.5	274
Vadodara	18.16	85.78	84.95	653.46	5.7	197
Jaipur	24.23	18.19	26.71	51.32	6.1	318
Non octroi MCs.						
Lucknow	74.50	35.60	69.14	44.69	4.6	218
Delhi	56.88	57.43	205.93	294.8	na	na
Calcutta	4.64	28.05	7.63	59.26	3.8	231
Bangalore	7.24	(10.77)	14.61	(35.33)	3.8	267
Bhopal	6.56	10.99	11.15	20.73	2.6	142
Hyderabad	45.26	63.97	58.97	84.75	4.1	266
Thiruvananthapuram	13.69	(17.34)	22.45	(63.89)	4.4	307
Chennai	37.27	55.26	53.99	155.65	3.2	235

Sources. (1) Audited Budgets of the respective municipal corporations
(2) Finance Accounts, Ministry of Finance, Government of India, 1995–96
Note. Figures in parenthesis suggest positive figures.

The expenditure analysis has suggested that there are corporations which commit capital expenditures above their fiscal capacities and there are corporations which cutback or are incapable of adequately managing their capital expenditures. It is observed that the level of gross fiscal deficit in a large number of corporations had increased during the period 1990–95, with the exception of Thiruvananthapuram, Bangalore and Lucknow. While the two former corporations had posted fiscal surpluses, Lucknow municipal corporation had reduced its capital expenditure

[142] Gross Fiscal Deficit (GFD) = Total Revenue Receipts - (Revenue Expenditure = Revenue Expenditure + Total Capital Outlays) /Total Revenue Receipts
[143] Fiscal deficit shown as a percentage of Gross Domestic Product.

significantly during this period. Similarly, Delhi municipal corporation had a large percentage of unutilized capital account fund at its disposal in FY 1994–95.

The changes in the fiscal positions of corporations are well captured in the per capita gross fiscal deficit. While the per capita gross fiscal deficit of Vadodara was to the tune of Rs.84.95 in FY1990–91, it had increased to Rs 653.46 in FY1994–95. Similarly the per capita gross fiscal deficit of Chennai has increased from Rs 53.99 in FY 1990–91 to Rs 155.65 in FY 1994–95. The fiscal positions of both these corporations had deteriorated due to the significant increase in the level of their capital expenditures during this period.

A comparison of fiscal positions of municipal corporations of respective states reveals an interesting pattern. In spite of the estimation differences,[144] the per capita gross fiscal deficit estimates support the view that the creditworthiness of these two levels of governments are not related. With the exception of Vadodara, the per capita gross fiscal deficits were larger in the case of states. However, the pattern supports the view that the creditworthiness of municipal corporations is largely influenced by their fiscal arrangements and financial management efficiencies rather than the fiscal health of their higher level of government.

This calls for a change in the approaches used in the study of urban finance. While there are fiscal linkages between states and their local bodies, the fiscal health and creditworthiness of local levels of governments are largely influenced by their own fiscal arrangements. This highlights the importance of developing efficient financial management systems and institutional fiscal arrangements at the levels of urban local governments in India to provide public goods and services and to invest adequately in the growth and distributive sectors of the local economy.

[144] While the fiscal deficits at the level of municipal corporations are estimated as a percentage of total revenue, fiscal deficit at the level of states are shown as a percentage of State Domestic Product.

CHAPTER 6

FUTURE PERSPECTIVES AND POLICY IMPLICATIONS

Alternative Institutional Arrangements in Urban Management

One of the main issues which dominates urban governance literature in recent times is whether centralized and unitary urban governance is more efficient and equitable than the decentralised structure of governance in the provision of public goods and services. Until the 1970s, the dominant theory of local public sector organization was that the big and centralized structures were better. Decentralisation and polycentric governance were viewed as inefficient, unresponsive and a threat to democracy (Hawley and Zimmer 1970).[145] The failure to provide adequate quantity and quality of urban services and their wide disparities over space and people is attributed to the absence of a strong unitary form of urban governance. The suggested strategy is to organize the administration as a single integrated system, tapering upward and culminating in a single chief executive officer (Anderson and Weidner 1960).[146]

Empirical research over the last fifteen years however does not support the above justification for a unitary form of urban governance (Mitchell *et al.* 1988).[147] These findings challenge the view that larger centralized institutions were always more efficient and equitable at providing public goods and services. In fact evidence suggests that smaller decentralized units of government produce more effective and equitable distribution of goods and services and do so more efficiently than larger centralized municipal governments (E.Ostrom and Whitaker 1973).[148]

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[145] Hawley A H and B G Zimmer. 1970. *The Metropolitan Community: Its People and Government.* Beverly Hills: Sage Publications.
[146] Anderson W and E W Weidner. 1960. *American City Government.* Rev ed., New York: Henry Holt.
[147] Mitchell W et al. Twenty Five Years of Public Choice and Political Science. *Public Choice.* 57.
[148] Ostron E and G P Witaker. Does Local Community Control Make a Difference? Some Preliminary Findings, *American Journal of Political Science.* 17.

In spite of these impressive observations with regard to the importance of the decentralised structure of local government on the effectiveness and efficiency of service provisions, consensus on the form of urban governance has not emerged. Discussions of metropolitan governance continue to be more rhetorical than scientific. A generally held view is that local government does not make a great deal of difference in service effectiveness, because local governments are relatively impotent to affect important policy outcomes, and municipal governments lack sufficient discretionary authority to control the scope and content of their own policy choices.

In most federal systems of governance, the central and state governments are considered omnipotent and local governments are treated as mere "creatures of the state". This is also true in the case of India. The constitutional and state legislative frameworks condition the state dominance over the local governments. Another characteristic of the urban governments in India is their centralized system of governance. In most municipal corporations municipal commissioners are appointed by the state to ensure propriety in fund management and to ensure state controls over the local governments and the system of governance is centralized with the political and administrative heads of the corporations. The importance of the 73rd and 74th constitutional amendments and the *nagarpalika* bill in India should be perceived in the context of this widely held view that the scope and content of fiscal arrangements at the local levels are controlled by the state. We are of the opinion that the subordinate relationship of local governments to their state government does not, however, abrogate the choices municipal governments could make in the production and provision of goods and services. It is essential to understand that while the scope of these service arrangements is constrained by the authority of the state, it is not exclusively defined by the state. Earlier discussions on the legal and statutory provisions of capital financing suggest that even within the prevailing state-local fiscal relationships, municipal corporations have significant amount of scope to manage their resources and expenditures more efficiently.

Though there is little doubt that state laws and constitutional requirements influence the content, scope and level of municipal policy choices, these conditions vary among the various states in the country. A review of functional and tax authorities and debt financing arrangements stipulated by the state statutes and municipal corporation acts discussed in Chapter 2 suggests that states have significant discretionary powers to determine the scope and content of municipal policies. At the same time, we have observed that municipal corporations have sufficient powers to determine the content and scope of planning, financing and monitoring the production and provision of public goods and services.[149]

Variation in Fiscal Arrangements

There is significant scope for improving the effective and equitable distribution of services within the existing and perceived fiscal arrangements between the state and local governments in India. Even though we did not go in depth into the implications of varied institutional arrangements on the production and provision of public services, discussions with the local officials and politicians in some of the corporations (for example Vadodara and Thiruvananthapuram) suggest that the effectiveness of public service provision is largely influenced not only by the fiscal arrangements between the various levels of governments but also by the lack of political will and administrative decentralisation to introduce bold and innovative policies to enhance the capital investment capacities of local governments.[150]

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[149] As compared to municipalities, municipal corporations in India have more freedom to determine the structure and form of functional and revenue authorities and institutional arrangements for the production and provision of public services. These choices are further empowered following the 74th constitutional amendments on urban governance.

[150] Besides, the examples of Ahmedabad and Surat municipal corporations in Gujarat could be sighted as two distinct models service arrangements with distinct implications The significant improvement in the level and absorption of capital investments initiated in these two corporations are the result of the two distinct models of urban management. While the Ahmedabad municipal corporation has followed a proactive public-private partnership development model, the Surat municipal corporation has followed a decentralized administrative model for implementation of the city development projects. Evidences from these two corporations suggest that state statutes do not hinder initiatives and innovative functional and financial arrangements by local governments. Effectiveness in the production and provision of public services largely depend on the policy initiatives and political and administrative will to implement them (Narayanan Edadan, *Urban Governance and Capacity Building*, Overseas Development Agency (mimeo), July, 1997).

The comparative analysis of fiscal and debt profiles presented in the earlier chapters suggests wide variation across municipal corporations in their resource and functional arrangements. Table 6.1 explains this with respect to a few major fiscal and financial indicators. The table also suggests that the variations in per capita revenue generation and redistributive and developmental expenditures of municipal corporations are not only due to their distinctive obligatory and discretionary fiscal arrangements but also due to their differential fiscal management performances. The coefficient of variation also suggests that increase in the variation of some of these variables could be attributed to their differential performances. The increase in the average per capita revenue and expenditure suggests that in general terms all municipal corporations have improved their fiscal capacities. While the increase in the revenue capacities did not show much variation, increase in redistributive and developmental variables has shown significant variations suggesting differential expenditure management performances. Another area of fiscal variation across municipal corporation is with regard to the level and performance of debt financing.

Table 6.1 Per Capita Mean and Coefficient of Variation, 1990–91 and 1994–95

Variables	Mean (x) 1990-91	Co.Var 1990-91	Mean (x) 1994-95	Co. Var 1994-95
Revenue Receipt				
Tax Revenue	176.32	0.71	253.22	0.84
Property Tax	53.28	0.71	74.39	0.75
Non Tax Revenue	34.88	1.29	58.67	0.86
Grants In Aid	38.53	0.69	72.30	0.66
Revenue Expenditure (Re-distributive)				
Administration and Overheads	50.56	0.91	76.49	0.78
Water Supply & Sewerage	33.54	1.06	43.52	1.40
Public Health	34.20	1.11	47.00	1.15
Education	29.15	1.41	35.31	1.57
Capital Expenditure (Developmental)				
Water Supply and Sewerage	3.84	1.18	3.28	1.36
Roads and Bridges	17.18	1.14	25.67	1.17
Debt Financing (Capacity building)				
Debt Outstanding	169.78	1.39	174.51	1.64
Debt Servicing	29.04	1.04	33.53	1.68
Debt Service Coverage Ratio	1.18	1.06	4.59	3.42

Notes: (i) Coefficient of Variation (Co.Var) = x / ∂, where, x = Mean and ∂ is the standard deviation of the variables.

(ii) Average values in Rs. at current prices

(iii) Sources: Municipal Corporation Budgets, 1990–91 to 1995–96

All the salient variables of debt financing such as the outstanding per capita debt and per capita debt servicing and debt service coverage ratio have increased in their variations over the years. This is particularly true in the case of DSCR, its coefficient of variation has increased from 1.06 during FY 1990–91 to 3.42 in FY 1994–95. The wide variations in the debt financing profile support the view raised in the earlier chapters that while some of the corporations have managed their operating account efficiently to service their debt, some other municipal corporations have practised poor debt servicing inspite of posting significant amounts of operating surpluses. It is observed that while high debt using corporations such as Mumbai and Vadodara have reached the limits of their internal capacities to service additional debts, corporations such as Thiruvananthapuram, Bangalore and Jaipur have significant levels of internal capacities to leverage additional debt. It is therefore suggested that the wide variations in the resource and expenditure authorities and debt financing arrangements noted earlier should be taken into consideration while proposing any policies for improving the fiscal health and debt management capacities of the urban local bodies.

Impacts of Debt Financing

Impacts of debt financing can be examined from many angles. Some of the issues which are examined in this study relate to (a) capital expenditure; (b) dependency on state government transfer; and (c) tax revenue mobilization.

Capital Expenditure Capacity

It is observed that five of the major debt leveraged corporations invest more than 60% of their capital on asset creation. It is also observed that a large number of corporations have invested a high percentage of their capital outlays on non-infrastructure related projects. Capital projects funded by Ludhiana, Mumbai, Vadodara, Delhi, Chennai corporations include water supply, sewerage and drainage, roads and bridges and remunerative enterprises (Table 3.2). This expenditure pattern could also be influenced by the market borrowing conditions prescribed by the *Acts*. While the financial capacities of these corporations have improved as a result of debt financing, it is not very clear whether the projects financed through market debt are more efficient than other projects financed through state loans and grants.[151] What could be said, however, is that the corporations which have availed themselves of the debt have realized a higher level and better spread of investments on asset creating projects.

We have observed that while the growth in the level of capital expenditure in development activities in real terms is related to the population size of cities, the per capita expenditure is not related to city size. This is because smaller cities such as Vadodara, Ludhiana and Jaipur have succeeded in mobilising adequate resources to finance capital expenditure as compared to Calcutta, Hyderabad, Bangalore corporations. In addition to the poor mobilisation in the capital, another factor responsible for the poor level of capital expenditure is the deferral and cutback expenditure policies pursued by some of these corporations. The poor level of capital expenditure of Thiruvananthapuram and Bangalore inspite of their huge internal resource capacities, are reflections of these cutback strategies.

Resource Mobilisation

A note of caution here: since most of these projects are not priced efficiently, higher level of debt could impose an additional burden on the taxpayers. Since the prevailing level of debt is low, at present on an average the overall "frictional effect of taxation" is low. However, the frictional fiscal effect of debt servicing is as large as 9.96 percent in the case of Delhi as compared to 0.05 percent as in the case of Bhopal.[152] Future strategies of debt financing should take into consideration this fiscal implication of servicing the outstanding debt. The study has suggested that since nearly all corporations have reached their tax thresholds, additional debt servicing should be leveraged against non-tax sources as well as against the physical assets of these

[151] This is one of the areas of research suggested in the future. Since this issue is outside the scope of this study it is recommended that the project management efficiency of projects financed through market debt as compared to projects financed through state grants and loans is studied. Our conjecture is that in the absence of more efficient institutional arrangements in the provision and production of urban services, municipal corporations are not capable to realize higher levels of project performance efficiency whether the projects are funded through state grants or through market borrowing.

[152] It should be noted that this fiscal effect is the theoretical tax effect of debt servicing. Even though the effect shows the maximum fiscal implication of debt servicing, it is not desirable nor is it recommended to redeem the total outstanding debt.

corporations. This calls for an efficient asset management strategy on the part of the municipal corporations. These fiscal thresholds should be given due consideration while formulating the future debt financing strategies of these corporations.

This issue is further supported by the high gross fiscal deficit conditions of these corporations. While Vadodara, Hyderabad, Chennai and Delhi corporations have higher levels of gross fiscal deficit and are therefore less healthy fiscally, Thiruvananthapuram and Bangalore municipal corporations have posted gross fiscal surpluses to the tune of 17.34 percent–10.77 percent respectively during the FY1994–95. These corporations have significant levels of operating surpluses which could be leveraged against capital expenditure.

One of the main factors determining the investment management capacity of the corporations is their professional capacity to plan and implement capital projects. We have observed that while most corporations have high employee-population ratios, their skewed professional-non-professional ratios suggest poor project management and monitoring capacities. Excessive project overruns and inefficient project management suggest the need to enhance project management capacities of municipalities to absorb higher levels of capital. Debt financing and institutional reform to improve the internal professional capacities as well as to institute alternate institutional arrangements in the production and provision of public infrastructure and services therefore should go hand in hand.

State Transfer of Funds

One of the contentious issues in the existing fiscal arrangements between states and local governments relates to the impact of state transfer on the violation or infringement of the autonomy of local governments. Devolution of resources and functions from states to local bodies is an important element of the decentralization strategy conceived in the constitutional amendments. Some of the *State Finance Commissions'* recommendations suggest that the level of state transfer to large urban centres would decline as a result of the "equalization transfer strategy" being proposed by the

Commissions.[153] However, if issues such as "ad-hocism", "unpredictability" and inertia on the part of the local bodies to take fiscal and financial responsibilities owing to excessive dependency on transfers could be taken care of through a positive transfer strategy, debt financing and state transfer of funds could play positive and mutually supportive roles to increase the resource capacities of corporations.

Debt Servicing

Prevailing debt servicing mechanisms are not efficient. The main recourses for municipal debt default are land and buildings and the corporation fund, with ultimate recourse to state guarantees. The issue of municipal debt liability remains nebulous in the absence of clear debt recourse covenants. Since the prevailing debt repayment mechanism depends largely on the property tax, we have observed that the cumulative municipal tax burden on immovable property in some of the major corporations has gone up significantly.

The inverse growth profiles of debt and tax revenue raise serious doubts on the debt financing sustainability and long term service solvency of a large percentage of the corporations. We have observed that a few corporations are highly leveraged in their debts and based on the experiences of some of the well-managed corporations we assume that a debt servicing ratio in the range of 10 percent–12 percent is manageable if the municipal finance is properly managed. It seems probable to conclude that the lower growth in the tax revenue as compared to the growth in debt raises concerns on the sustainability of the prevailing debt policy and, therefore, would compel these corporations to follow either a progressive revenue raising strategy or an expenditure management control strategy to reduce the debt burden.

An analysis of the internal resource capacities of corporations (DSCR) suggests that some of these corporations which use relatively less debt at present have a significant

[153] According to the *Karnataka State Finance Commission* about 48.5% of the total grants conferred on the urban local bodies goes to Bangalore city. If the "equalisation strategy" proposed by the Commission is implemented, the share of Bangalore would be reduced to 9.40% (*Karnataka State Finance Commission*, Government of Karnataka, 1996).

amount of operating surpluses to leverage additional debt. This is true in the case of Thiruvananthapuram, Bangalore and Jaipur municipal corporations. In spite of the wide variation in the operating surplus, we could say that over the years, municipal corporations in India have improved their internal resource capacities. Even though a large number of corporations have reasonable levels of operating surplus, it is not known what percentage of these surpluses are "free" for debt servicing. We have observed earlier that many corporations resorted to defer committed expenditure including debt servicing and it is as high as 30 percent–40 percent, and therefore only about 70 percent of these operating surpluses is available for debt financing.

Table 6.2 summarizes the levels of debt servicing stress and internal capacity to service additional debt through a classification of corporations. It is observed that Vadodra, Mumbai, Chennai and Delhi corporations are relatively more debt leveraged as compared to Calcutta, Hyderabad, Jaipur, Bhopal, and Ludhiana corporations. Bangalore and Thiruvananthapuram corporations have registered higher levels of debt during the FY 1990–91 and FY 1994–95 period, even though their level of outstanding debt as on FY 1994–95 is comparatively low. What is more alarming is that these corporations, in spite of their large operating surpluses, defer capital expenditures and debt servicing.

It is also observed that Thiruvananthapuram, Bangalore and Jaipur corporations have the highest levels of debt carrying capacities along with lower levels of frictional effects of taxation as compared to Mumbai and Delhi which have the highest levels of frictional effects of taxation and lower levels of debt carrying capacities. While Chennai, Vadodara and Ludhiana are around the average in terms of their debt carrying capacities, Calcutta, Bhopal and Lucknow have the least internal capacities to service additional debt.

Table 6.2 Classification of Municipal Corporation based on Indebtedness and Debt Carrying Capacities

Measure of Indebtedness

Annual Growth	Debt/ Tax Rev *High*	*Medium*	*Low*
High	Lucknow, Vadodara		Bangalore
Medium			Thiruvananthapuram
Low	Mumbai, Delhi	Chennai	Ludhiana, Jaipur, Calcutta, Bhopal, Hyderabad

Measure of Indebtedness (Municipal Debt Incidence)

Annual Growth	PC Debt *High*	*Medium*	*Low*
High	Vadodara		Lucknow, Bangalore
Medium			Thiruvananthapuram
Low	Mumbai, Chennai, Delhi		Calcutta, Ludhiana, Jaipur, Hyderabad, Bhopal

Measure of Debt Carrying Capacity and Fiscal Effects

Fiscal Effect	Debt Carrying Capacity (DSCR) *High*	*Medium*	*Low*
High	Jaipur, Bangalore, Thiruvananthapuram	Vadodara, Ludhiana, Hyderabad	Calcutta, Bhopal
Medium			Lucknow
Low		Chennai	Mumbai, Delhi

A review of the debt servicing practices of these corporations suggests that in the absence of structured debt servicing arrangements, municipal corporations in India follow a "debt repayment strategy" instead of a " debt management strategy".[154] Our contention is that the prevailing practice of repaying old debt from new debt is very unproductive and keeps the corporations in perennial state of indebtedness. What is required is a system of efficient debt deployment and servicing structures to yield a

[154] Debt management in this context refers to a debt financing strategy which will yield a positive sum.

positive sum. Such a debt management strategy ensures that either the consumption benefits of the present generation are balanced with the tax burdens of the future generation or the provision of services is made on the "benefit principles".[155] Implementation of proper debt servicing structures should take into consideration the long-term fiscal solvency of the municipal bodies prior to the introduction of these financing instruments.

Future Perspectives in Debt Financing

We examined the issue of future debt financing perspectives from two angles. The first perspective is similar to municipal finance management restructuring. It is based on the assumption that the existing legal and statutory regulations will remain in place and the municipal corporations' capacity to raise market loans is influenced by their fiscal health and financial management systems.

A few prerequisites are, however, necessary to implement this approach.

First of all municipal corporations should introduce budgeting and financial management reforms. Even though we have observed encouraging attempts to introduce improved accounting and financial management systems in Mumbai, Chennai, Bangalore, Delhi, and Vadodara corporations, these reforms should be implemented by all other corporations. Financial and fiscal reforms such as performance budgeting, double entry accounting system, efficient management of sinking fund, management of a separate loan budget [156] and enhancement of financial management capacity of the corporations are some of the measures which could be considered. Privatization of some of the fiscal arrangements could enhance investor confidence.

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[155] While the former debt servicing arrangement is applicable in the case of general obligation bonds, the latter is a case of revenue bonds.

[156] Section 94 to 104 of *Bombay Provincial Municipal Corporation Act,* 1949 provides for a loan budget showing details of government loans, open market borrowing, loans from LIC and HUDCO, borrowing from commercial banks and the World Bank loans.

Another reform need relates to improvements in the enhancement and collection of tax. We have observed serious limitations on the part of most of the corporations to introduce modern valuation and collection procedures.[157] Limited by the unscientific valuation and inefficient collection, a majority of the corporations resort to additional tax on properties to share the burden of urban service provision.[158] On the other hand what is required is to introduce scientific and centralized valuation procedures and efficient administrative reforms in tax collection and enforcement.[159]

Expenditure management is another important area demanding serious attention. It is observed that a majority of the corporations have posted revenue surpluses. An examination of the budgeted and actual expenditure pattern suggests that a significant percentage of committed expenditures is not met. Even though inflated levels of resources are estimated to balance the expenditures during the budgeting process, in the context of poor resource mobilization, municipal corporations are often forced to cutback their expenditures. Moreover, burdened by the increasing administrative and wage bill, the main victims of such expenditure containment policy are capital improvement programmes. Since some of these expenditure cutbacks are not planned during the budgeting stage, the result has been uncompleted capital works and poor maintenance of existing capital stock. It is therefore suggested to reform the budgeting process to effectuate a balanced budget.[160] In addition to the efficient management of resources, this strategy also calls for an efficient institutional arrangements in the

[157] Recent attempts to introduce zone-based property tax valuation in Hyderabad and Chennai are encouraging trends. Experiences from Surat and Ahmedabad municipal corporations suggest that introduction of computerised collection, backtracking and legal enforcement methods could increase octroi and property tax collection as much as 300%.

[158] A main impact of this strategy is the increase in the cumulative tax burden on immovable property ranging from 60–100%. While the Chelliah Committee on Fiscal Reform (1966) has observed that the average cumulative tax burden is about 60%, another study done at NIPFP suggests that the cumulative burden for Mumbai is more than 100% in zones with metered water supply. In light of the Chelliah Committee's suggestion to reduce the total tax burden to 30% many reforms in these areas are highly warranted.

[159] The significant increase in the octroi revenue through privatization of collection services by the Jaipur municipal corporation is worth consideration.

[160] Balanced budget in this context refers to a comprehensive local government budget which is aimed to provide need-based basic public services and demand based economic services to the local community and the resource mobilisation required to meet these expenditure requirements.

production and provision of public services through appropriate pricing, targeting and public-private partnerships.

Another area of reform relates to efficient pricing of urban services provided by the corporations. Since a significant amount of capital grants and market loans is utilized for water and sewerage projects by those corporations, it is essential to introduce more efficient pricing and enforcement measures. Our opinion survey has suggested that there is a general willingness on the part of decision makers to put in to effect more financially sustainable service provision arrangements. However, more importantly, corporations with bureaucratic governance have shown urgency to introduce user charges and innovative resource mobilization measures.

The second perspective assumes that municipal corporation acts and state statutes are suitably amended to provide enough financial and fiscal freedom to the corporations to raise and manage resources based on their own resource capacities and debt recourse arrangements. The decentralization and fiscal autonomy measures envisaged in the 74th constitutional reform provide the basic framework for this approach.

In addition to the budgetary and financial reforms suggested above, some more actions are recommended.

A basic issue in municipal debt financing revolves around the question of lateral guarantees of market borrowing made by the corporations and the question of debt liability. It is desirable to amend the market borrowing limits and the state approval provisions stipulated in the municipal corporation acts to facilitate municipal corporations to utilize their "net free surplus" to leverage additional debt. However, this issue should be looked more comprehensively within the framework of macro economic concerns of increasing internal debt of the country as well as increasing financial requirements of urban local bodies.

A basic issue in this context relates to the solvency of the market debt instrument which some of the municipal corporations are planning to float in the market in the form of municipal bonds.[161] In the absence of an efficient "tradable market" for such instruments, institutional buyers would be picking up a significant percentage of such instruments.[162] One of the areas which would require the attention of policymakers is to create a tradeable market for such instruments and it is suggested that institutions which support such municipal market instruments should take the required steps to ensure its success such that these instruments could be replicated.

Since a large portion of capital expenditure incurred by the corporations is not income generating, debt management needs to be supported by the growth in tax and non-tax revenue, income from municipal assets [163] as well as by the "pooled" resources from the state. The resource devolution strategies prescribed by the various *State Finance Commissions* suggest that a "state transfer pool" strategy which would ensure fiscal and financial autonomy to the local bodies is likely to be implemented by majority of the state governments. Under this framework it is easy to build debt servicing structures in the form of special purpose vehicles or structured versions of the existing sinking funds or escrow accounts.

A major limitation in the prevailing municipal accounting system is the absence of accurate information on assets and liabilities.[164] It is, therefore, necessary to introduce land assessment and valuation studies in all corporations to provide detailed

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[161] Out of the 12 municipal corporations, Mumbai and Calcutta corporations are in the process of floating municipal bonds. Similar intentions are expressed by Vadodara and Chennai and Bangalore corporations.

[162] One of the main conditions for the success of municipal bond is its "liquidity". At present some of the corporations are planning to sell only 30–40% of the bonds to the public. In the absence of an efficient market which would set the market price according to the demand for such instruments, it is likely that buyers would be mainly redeeming such instruments on maturity. This structure will not develop a market for such instruments. We also observe that there would be a limit for institutional subscription for municipal bonds if a large number of municipal corporations plan to float bonds. The need for a market for bond is required more than ever before in this context.

[163] At present income from asset form only a very small part of the revenue of the corporation; it comprises of 0.25% of the total revenue of Mumbai, 3.2% in Bangalore and 2.8% in Thiruvananthapuram.

[164] Recent reforms introduced by a few corporations set new directions.

information on resources owned and operated by the corporations in such a way that they could be leveraged for debt financing.[165] It is advisable to review the present practice of "land sale" and develop structures to facilitate "land lease" on negotiable terms.

The creditworthiness of some of the corporations is enhanced by the cash flow accrued from the octroi tax. In the event of abolition of this buoyant tax [166], it is essential to review the debt servicing arrangements for general obligation debts. Restructuring the covenants for service rates and tariffs and creation of a separate debt servicing fund are some of the steps required in this direction.[167]

In conclusion, we observe that there are reasonable levels of internal resource capacities within some of the municipal corporations to leverage additional debts. However, the corporations may be not able to do so as long as the issue of debt liability is not addressed which is sufficient enough to ensure marketability and liquidity of municipal debt instruments. Perhaps, what is required is a change in the state policies to facilitate market borrowing by the corporations with appropriate market-cum-rule-based institutional structures which would address the issue of liability and liquidity of such instruments.[168]

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[165] Discussions with municipal officials suggest that Calcutta municipal corporation is one of the richest corporations in India in terms of physical assets. Due to its lack of asset management the corporation has not been able to leverage this huge asset for capital financing.

[166] Even though there is a general agreement at the national level to phase out octroi tax, in the absence of alternative sources of tax, it is still not clear when the octroi tax will be abolished. However, it is probable to assume that octroi tax will be abolished in the near future. The significance of a pooled state fund in lieu of all shared taxes, grants including octroi compensation gains more importance in this context.

[167] It is proposed to examine the feasibility of restructuring the existing sinking fund into a more efficient and transparent debt servicing fund.

[168] Recently some of the municipal corporations such as Ahmedabad, Poona, Mumbai, Calcutta, Coimbatore, to name of few, have approached rating agencies to rate their creditworthiness. However, it is not known whether many corporations will succeed to mobilize funds from the market in the absence of explicit state guarantees.

In this context we may quote Ter-Minassian (1996)[169]

> "International experience suggests that sole reliance on market discipline for sub-national governments is unlikely to be appropriate in many circumstance...Market discipline can be a useful complement to other forms of borrowing controls. Rules based approaches to debt control would appear preferable, in terms of transparency and certainty, to administrative controls and also to statutory limits defined in the context of the annual budget process."

New initiatives in this direction should reform the existing system of lateral guarantee arrangements from a "controlled system" to a "capacity enhancement system" by introducing provisions for structured debt obligations and fund utilization by the corporations. It should institute fiscal and financial arrangements to improve the creditworthiness and management capacity of local bodies. However, it is needless to emphasize that in the context of changing administrative decentralization and devolution of resources, the issue of municipal debt should be examined more comprehensively by taking into consideration the fiscal and financial resource capacities and institutional arrangements in the production and provision of municipalities as well as the issue of debt liability and internal indebtedness of the country.

[169] Teresa Ter-Minassian. 1996. Borrowing by Subnational Governments: Issues and Selected International Experiences, IMF Discussion paper.

Appendix 1

Extracts from the 74th Constitutional Amendment, 1992

A. **"Twelfth Schedule**
(Article 243W)

1. Urban planning including town planning.
2. Regulation of land-use and construction of buildings.
3. Planning for economic and social development.
4. Road and bridges.
5. Water supply for domestic, industrial and commercial purposes.
6. Public health, sanitation conservancy and solid waste management.
7. Fire services.
8. Urban forestry, protection of the environment and promotion of ecological aspects.
9. Safeguarding the interest of weaker sections of society, including the handicapped and mentally retarded.
10. Slum improvement and upgradation.
11. Urban poverty alleviation.
12. Provision of urban amenities and facilities such as parks, gardens, playgrounds.
13. Promotion of cultural, educational and aesthetic aspects.
14. Burials and burial grounds: cremations, cremation grounds and electric crematoriums.
15. Cattle pounds; prevention of cruelty to animals.
16. Vital statistics including registration of births and deaths.

17. Public amenities including street lighting, parting lots, but stops and public conveniences.

18. Regulation of slaughter houses and tanneries.

243Y. (1) The *State Finance Commissions* constituted under Article 243-I shall also review the financial position of the municipalities and make recommendations to the Governor as to-

(a) the principles which should govern-

i. the distribution between the state and the municipalities of the net proceeds of the taxes, duties, tolls and fees leviable by the State, which may be divided between them under the Part and the allocation between the municipalities aι all levels of their respective shares of such proceeds;

ii. the determination of the taxes, duties, tolls and fees which may be assigned to or appropriated by, the municipalities;

iii. the grants-in-aid to the municipalities from the Consolidated fund of the state;

(b) the measures needed to improve the financial position of the municipalities;

c) any other matter referred to the *Finance Commission* by the governor in the interests of sound finance of the municipalities

(2) The Governor shall cause every recommendation made by the commission under this article together with an explanatory memorandum as to the action taken thereon to be laid before the legislature of the state

243Z. The legislature of a state may by law make provisions with respect to the maintenance of accounts by the municipalities and the audit of such accounts.

243ZE.(1) There shall be constituted in every metropolitan area a *Metropolitan Planning Committee* to prepare a draft development plan for the metropolitan area as a whole

(2) The legislature of a state may, by law, make provision with respect to-

(a) The composition of the Metropolitan Planning Committees;

(b) the manner in which the seats in such Committees shall be filled;

Provided that not less than two-thirds of the members of such Committee shall be elected by and from amongst, the elected members of the municipalities and chairpersons of the *panchayats* in the metropolitan area in proportion to the ratio between the population of the municipalities and of the *panchayats* in that area;

c) the representation in such committees of the Government of India and the Government of State and of such organisations and institutions as may be deemed necessary for carrying out of functions assigned to such committees;

(d) the functions relating to planning and co-ordination for the metropolitan area which may be assigned to such committees;

(e) the manner in which the chairpersons of such committees shall be chosen

(3) Every Metropolitan Planning Committee shall, in preparing the draft development plan-

(a) have regard to-

i. the plans prepared by the municipalities and the *panchayats* in the Metropolitan area;

ii. matters of common interest between the municipalities and the panchayats, including co-ordinated spatial planning of the area, sharing of water and other physical and natural resources, the integrated development of infrastructure and environmental conservation;

iii. the overall objectives and priorities set by the Government of India and the Government of the State;

iv. the extent and nature of investments likely to be made in metropolitan area by agencies of the Government of India and of the Government of the State and other available resources whether financial or otherwise;

(b) consult such institutions and organisations as the Governor may, by order, specify

(4) The chairperson of every *Metropolitan Planning Committee* shall forward the development plan, as recommended by such committee, to the Government of the State.

243ZF. Notwithstanding anything in this Part, any provision of any law relating to municipalities in force in a state immediately before the commencement of the Constitution (Seventy-fourth Amendment) Act, 1992, which is inconsistent with the provisions of this Part, shall continue to be in force until amended or repealed by a competent legislature or other competent authority or until the expiration of one year from such commencement, whichever is earlier:

Provided that all the municipalities existing immediately such commencement shall continue till the expiration of duration, unless sooner dissolved by a resolution passed to that effect by the Legislative Assembly of that state or in the case of a state having a Legislative Council by each House of the legislative of that state.