

INFRASTRUCTURE FINANCE IN THE TIME OF REVENUE CRUNCH: Exploring New Avenues for Urban Local Bodies

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ABSTRACT

*Infrastructure in general and urban infrastructure in particular has proved to be a **pons asinorum** of economic development. Whilst infrastructure is an umbrella term, provision of many of its components is the duty of the urban local bodies (ULBs). Given the financial crunch faced by the ULBs, innovative initiatives are called for. This paper looks at the specific situation in the state of Maharashtra. Pointing out the heterogeneity in the composition of ULBs within Maharashtra, the paper goes on to suggest two such initiatives for raising resources. One of the initiatives deals with the bond financing and creation of modified financial products; the other addresses the question of rationalization of property tax. In each case the difficulties and pre-requisites are dealt with.*

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I. Introduction

Provision of quality infrastructure especially in the urban areas is perhaps the *numero uno* problem of Indian economic development. Infrastructure is an umbrella term that encompasses many things. Of these, some – by constitutional mandate – are the business of urban local bodies (ULBs henceforth). The new economic architecture has the uncomfortable consequence of creating a resource crunch at all levels of governments. The ULBs, being the weakest link in the hierarchy of governments, have been the hardest hit. Recourse therefore has to be taken to innovative initiatives. This paper focuses on two such initiatives. One is in the arena of finance, where we propose bank funding as well as muni-bond route. The other is the arena of rationalisation of tax setting in particular the case of property tax.

The paper is divided into five sections including the introduction. In the second section we give a brief backdrop dealing with the parametric environment that defines the relevant reality for our discussion. In the third section we turn to the details about ULBs in Maharashtra. The fourth section constitutes the core of this paper. Divided into several subsections, it delineates the general measures for improvement of resource position of the ULBs; deals with bank finance as well as the muni-bond initiative and the property tax initiative. The fifth and the final section concludes.

II. A Brief Backdrop

We have been brought up on the notion that India lives in her villages and consequently, India is rural India. To put it mildly, the current truth-value as well as the relevance of this notion is not overwhelmingly obvious. We are a rapidly urbanizing nation (this is not necessarily a matter of pride but merely a statement of fact). This is true whether one looks at the distribution of productive activity or population across the rural urban space. The accepted tenets of agglomeration economies underscore the tremendous productivity gains to be made from increasing city sizes. The future of India is decidedly urban and we need to welcome this fact in a positive way.

It is incontrovertible that *good infrastructure* is central to all economic activity. It facilitates efficiency in key economic services apart from improving economy's competitiveness. Further it also generates high productivity and supports strong economic growth. The infrastructure scenario is not at all rosy as may be seen from the Rakesh Mohan Committee Report and Indian Infrastructure Report that had estimated annual requirements of funds for infrastructure at \$ 26 bn during 1996-2001 and higher at \$ 43 bn during 2002-2006. The report had further added that about 15% of the investment could be financed externally and 85% had to be domestically raised. The availability of urban infrastructure whether drinking water, sewerage disposal, solid waste management or roads to name a few essential services leaves a lot to be desired. Data shows that while 20% of urban India does not have access to safe drinking water, almost 72% is not covered by any sewerage (IIR, 2001). It can hardly be overemphasized that the need for 'urban infrastructure', is assuming alarming proportions and needs *urgent* attention.

All this is putting tremendous burden on the ULBs who are constitutionally mandated to provide many of the infrastructure services and amenities. The situation has been further worsened by the transfer of additional responsibilities to the third tier of government (ULBs) as a consequence of the 74th Constitutional Amendment Act (CAA). Whilst this in itself is welcome in the context of the attempt to usher in an era of decentralised model of development, it also puts unbearable fiscal stress on the ULBs. One of the major consequences of the economic regimen of the last decade has been the more than commensurate reduction in resource handouts to sub-national

governments. The third tier of government, comprising the (rural and urban) local bodies, has been hit the hardest.

The last dozen years or so have set the tone for paradigm shift in the matter of rules of the game vis-à-vis policy design in the Indian economy. There is an inescapable necessity to refashion the older institutions that parameterise the macro-policy-environment. In doing so – especially for a developing country like India – the greatest onus is on all levels of governments. They need to integrate incentive compatible mechanisms in their institutional make up. Also, the governance structure has to move towards a decentralised set up from the heavily loaded centric form.

The organs of the state rather than seeing themselves as rulers of the polity must transform themselves into equal partners with other stakeholders in the emerging civil society. Civil society concerns have been around for several centuries now. As an item on the economic and political agenda it has staged a dramatic resurgence in the late twentieth century. It has been used by the social scientists of the West as well as the East, but with varying connotations. From the point of view of relevance to us, it is better to refer to civil society as a combination of state and non-state initiatives (in a participatory mode) for reorganisation and development of social, political and economic life, with the modern sovereign state serving as a pivot. The idea has to encompass all levels of government in the vein of political decentralisation and has to be comprehensively participative in its execution covering the NGOs, and other formal and non-formal agents/players/institutions in the economy. Armed with this backdrop, let us now turn to providing a brief backdrop about the state of Maharashtra, more particularly its ULBs' structure.

III. The Case of Maharashtra

Maharashtra State, spread over an area over an area of 3,08 lakhs sq.km., is one of the most populous States in India, with a population of 96,75 million as per the 2001 Census. It is also one of the most urbanized state in the country, with about 42.40% of its population residing in urban areas, as against the national average of 27.78%. The urban areas have experienced a higher population growth than that in the rural areas (viz. 39 per cent against 18 per cent). It held a pole position in terms of

development indicators (socio-economic) as also as a destination for foreign direct investment. This premier position is under pressure from other states. Obviously, serious initiatives need to be taken if this position is to be retained.

III.1. ULBs in Maharashtra

The heterogeneity among the ULBs in Maharashtra arises from the variety of Acts that govern them. Unlike other States, where all the ULBs are governed by a uniform Act, ULBs in Maharashtra are governed by the following four Acts:

- Bombay Municipal Corporation Act, 1888,
- City of Nagpur Corporation Act, 1948,
- Bombay Provincial Municipal Corporations Act, 1949,
- Maharashtra Municipal Councils, Nagar Panchayats & Industrial Townships Act, 1965.

Whilst there must have been some reasons for the emergence of these Acts at different points of time, they do contribute to some confusion when it comes to matters relating to interpretation and policy implementation. These Acts now need to be read together and modified in order to attain consistency between them, especially with regard to the aspect of discretionary and obligatory functions to be carried out by the ULBs. This will enable them to reflect the proper spirit of the 74th CAA.

III.2. Classification of ULBs

The parameters for classification of ULBs have been listed in Section 11 of Maharashtra Municipal Councils, Nagar Panchayats & Industrial Townships Act, 1965.

Population	ULB
Below 25,000	No Municipal Council
Between 25,001 and 40,000	'C' Class Municipal Councils
Between 40,001 and 1,00,000	'B' Class Municipal Councils
Between 1,00,001 and 3,00,000	'A' Class Municipal Councils

The single most important parameter defining the type/class of ULB is population. There is also – as an exception – a category introduced in Maharashtra, which is of ULB in the making. This is called the Town Panchayat and relates to a situation where the area has yet not lost its rural moorings. There are only two town panchayats in Maharashtra, as of now.

III.3. Heterogeneous Characteristics of ULBs in Maharashtra

The ULBs in Maharashtra present quite a heterogeneous picture. In order to get a flavor of this in a summary form, we present a table of related statistics. The statistics reported are the mean, standard deviation and the range in terms of population and area serviced within each class of ULBs. As far as the population goes there are no surprises. There is a gradual increase in the means as one goes from C class to A class and on to MCs. The relevant CVs show that there is a wide diversity in case of MCs as against other ULB categories. Similar comments may be made with respect to the area, however, the CVs show an almost opposite picture. These comments have to be understood from the point of view of financial implications for the ULBs. More specifically, the area to be serviced determines the expenditure incurred on provision of public amenities. On the other hand, greater population allows economies of scale to be reaped when it comes to provision of these services. The correlations reported also need to be commented upon. These show that whilst there is a significant correlation between the area and population in case of MCs, as far as the other categories go there seems to be no significant relation. Indeed as one goes to smaller ULBs, the correlation becomes more and more tenuous. This observation underlines the financial problems that are likely to be caused by the heterogeneous character of the ULBs.

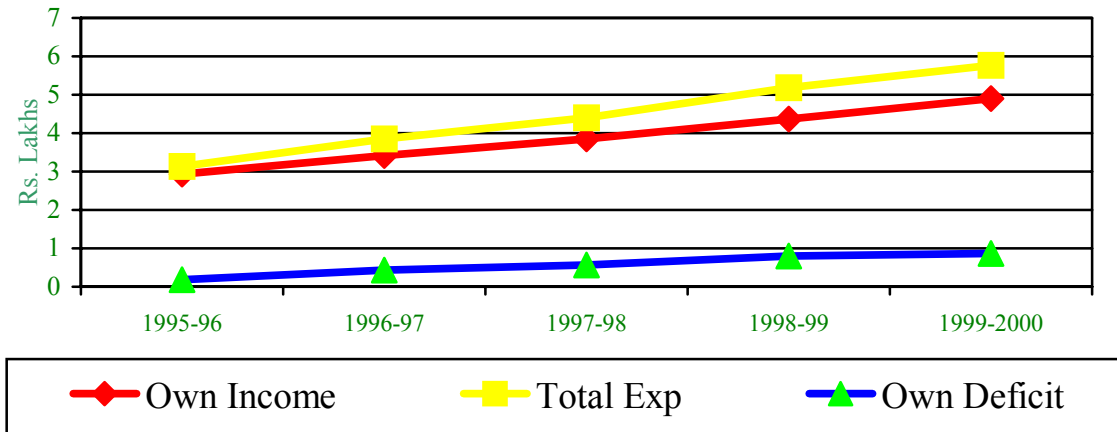
TABLE: STATISTICS RELATED TO ULBS IN MAHARASHTRA

Characteristic	Statistic	MC	MC-A	MC-B	MC-C
Population (lakhs)	Mean	12.89	1.91	0.58	0.21
	Standard Deviation	24.19	0.86	0.14	0.08
	C.V.	1.88	0.45	0.25	0.39
	Maximum	99.1	3.79	0.88	0.42
	Minimum	3.14	0.95	0.37	0.03
Area (sq. km.)	Mean	186.49	26.42	15.92	14.14
	Standard Deviation	152.94	20.05	11.45	19.17
	C.V.	0.82	0.76	0.72	1.36
	Maximum	603.0	81.64	47.26	152.81
	Minimum	13.34	3.94	2.54	0.67
Correlation		0.8227	0.1836	0.0541	0.0478
Notes:					

III.4. Brief Comments on Expenditures and Incomes of ULBs

In this section we look at the revenue expenditures of the ULBs in Maharashtra. The point of reference is the fact that the gap between revenue and expenditure in the case of ULBs in Maharashtra have been increasing overtime. This implies that urgent measures need to be taken to rectify this situation. Given the macroeconomic environment, it cannot be realistically expected that the governments at higher levels will come to aid. The prevailing situation can be seen from the graph that follows:

**GAP BETWEEN REVENUE AND EXPENDITURE OF ULBs IN
MAHARASHTRA**



It may be noted that the gap between revenue and expenditure has been widening over the last five years. The own deficit seems to have stabilized recently, but shows no decline. This needs to be understood in conjunction with two other givens of the system. One, that the ULBs will be called upon to do more and more (as per the functions listed in the 12th Schedule) and two, they will have to largely manage it on their own. The last statement is a consequence of the fact that the compulsions of macro-fiscal management regimen implies that the felt resource crunch at higher levels of governments will be passed on with greater force to the third tier. Finally, the ULBs will have to guard against the relatively softer option of operating at a low level of activity, so as to curb deficits. This will perhaps enable the ULBs to balance their budgets but they will be doing it at the cost of constitutional mandate and as such it is not just undesirable but is entirely unacceptable.

Given this background, and in sum, we may say that functional devolution to the ULBs, has not been matched by supporting financial devolution. This has naturally lead to too many responsibilities chasing a narrow resource base. This situation is further aggravated by the stipulation in Municipal Acts that ULBs *must* balance their budgets. Finally, it has been generally observed that quality of administration tends to be relatively poor at lower levels of government that has added to the difficulties: funds are

utilised for non-productive purposes resulting in poor delivery of services. Whilst this is a major problem, its proper identification is hampered by the fact that there simply does not exist a mechanism to collect data for monitoring quality of service provided.

As far as the income goes there are quite a few problems. First, grants received from the State do not help the ULBs in major developmental works, but support merely the day to day functioning of the ULBs. Also, the timing of these grants is highly unpredictable leading to efficiency losses. Revenues of the ULBs are throttled by such inherent structural bottlenecks like, limited autonomy about taxation powers, small bandwidth for non-tax revenues. This is coupled with some more general issues such as - inappropriate institutional arrangements, outdated accounting practices, lack of effective and efficient resource mobilisation methods, lack of transparency and accountability and most important being lack of citizen's participation. Thus the problems are operational, regulatory, legislative as well as to do with lack of incentive-compatibility in the make of ULBs' contractual structure.

IV Generating Funds for Urban Infrastructure

There are several alternative sources of revenue that have been discussed in the literature. We divide this section into two subsections. In the first, we briefly go over the standard measures for internal resource mobilization. In the second sub-section, we look at the property tax rationalization as a revenue raising exercise.

IV.A.1 Measures for Internal Resource Mobilisation

In this subsection we briefly catalogue some of the standard sources of revenue that are well documented and understood in the literature. Indeed these have been considered for adoption in various ULBs both in Maharashtra and in other States.

- **Land** is a basic and precious resource. Misuse of this resource is rampant. Clear demarcation of land use pattern and proper regulation and supervision of this aspect will provide a source of revenue for the ULBs.
- Floor Space Index (**FSI**) Bank is another novel way that has been used elsewhere but has yet to come into use in a big way in our country. Given the possible

constraints in terms of basic service amenities, granting the maximum possible FSI at a price, will yield tremendous revenue for the ULBs. Once such a bank is in place, one could then think in terms of a tradable (financial) paper that would help to mark to market the property prices in an indirect way. The builders could also think in terms of collateralizing assets and gain FSI. Perhaps one could think in terms of contributing amenity spaces in exchange for FSI. As an off shoot of the developments in this regard, there would emerge the possibility of development of TDRs (Transferable Development Rights) as an instrument of revenue generation.

- Improving overall accounting system of ULBs and indeed their finances would involve prudent and professional management exercise. There is also an obvious need to minimize unproductive expenditure and redirecting spending towards clearly specified and prioritized avenues or projects. The subsidies have to be identified and retained only in a socially essential manner in a clear and transparent fashion. All this would undoubtedly help in enhancing private sector participation.

IV.A.2 Bank Funding of Urban Infrastructure

Traditionally the ULBs received funds through loans and grants from the central and state government for the purpose. Over time these sources of finance have been drying up and the ULBs have been asked to find their own funding. The passage of the 74th constitutional amendment has made - at least in principle - a way for the financial autonomy of these bodies. Concomitantly, the banking sector has been undergoing rapid changes. These developments have manifold consequences and implications for the institutional and systemic makeup of financial sector in general and banking sector in particular.

Given this backdrop, an issue of increasing bank exposure to the emerging sector of Urban infrastructure is being proposed here with the active initiative of ULBs individually as well as collectively. The time is opportune for banks to take a view on the urban infrastructure, which has been neglected thus far. The banking sector is flush with funds and its traditional borrowers are disintermediating. The emergence of universal banks means that the commercial banks will need to take longer exposure than what they have been used to. The policy makers have to step in and give special status to

loans to this sector so that apart from satisfying the felt developmental need, it will relieve the pain of transition for the DFIs into commercial banks.

Given the concern of banks about their capital adequacy norms, NPAs and competitive margins there are ways that banks could possibly consider participation in this segment. One approach would be *direct funding* as in any other industry. In the initial phases this could involve cherry picking of projects till such time that the ULBs develop the required expertise and financial discipline and the lenders too develop experience of such lending. Adaptation and modification of the best practices followed elsewhere is essential so as to take into account the Indian reality and her developmental concerns.

Banks in India have been at the forefront of industrialization and even today despite competition from other intermediaries are the largest repositories of funds in the economy. This assumes particular importance in the context of the move towards universal banking. The unfortunate part is that there is very little exposure of banks and indeed, RBI does not even provide classified data on infrastructure lending as a separate category. For a more detailed discussion of these issues as well as the issues related to the Indian experience and the categorization of infrastructure projects that are particularly suited for banking lending see, Pethe and Ghodke (2001).

IV.A.3 Municipal Bonds for Urban Infrastructure

Funding through the capital market has been in the form of debt instruments popularly known as 'municipal bonds' which are more in the nature of structured financial products. Policy is already in place regarding the issue of such instruments by the urban local bodies. This however is at the initial public offer (IPO) level. Given that there is a resource crunch at all levels of governments, the ULBs can no longer realistically rely on aid/grants flowing from above. They need to stand up for themselves and work towards mobilization of resources. Muni-bond route is the potent of all such routes. This has been successfully pursued in most developed countries and indeed they form 80% of the debt market in the US of A. There are a few pre-requisites that need to be fulfilled. The chief amongst them is to do with getting data and accounting systems in order so that a meaningful credit rating is possible. However, there are very

few urban infrastructure projects in India, that have been perceived as commercially viable, even fewer can issue municipal bonds in the market. The weak financial position and revenue sources of the urban local bodies make this even more difficult.

Prima facie there would be very few ULBs capable (given their financial standing) of issuing muni-bonds on their own. This implies that there is a need to bring together a few ULBs with varying credit risks. As a group they would need to satisfy (after the diversification of risk) the minimal risk required for floating bonds. The muni-bonds then would be floated on a collective basis and linked to a particular type of infrastructure. The second encouragement for such an issue will need to come via a fiscal policy push that should ensure that such debt would attract similar tax treatment as that given to sovereign debt. After all, the constitution mandates a ULB to be the third tier of government and needs to be properly recognised as such. Finally, all such efforts will lead us nowhere if the paper so issued lacks liquidity and wide base of individual holding. In this context every effort is needed on an urgent basis to put in place a vibrant and thick secondary market for muni-bonds. Only then will there be a serious chance of such an effort reaching a successful fruition. For greater details on this and the next section please see, Pethe and Ghodke (2002).

IV.A.3.1 A New Credit Instrument: Structured Debt Obligations (SDOs)

A new type of credit instrument – clearly related to what is being discussed above – has been designed to enable the local bodies to tap the capital market. These instruments structured debt obligations (SDOs). This is a mechanism by which the debt repayment obligations are given utmost priority and kept independent of the overall financial position of the borrowing agency (ULB in our case).

It ensures that a trustee would monitor the debt servicing and that the borrowing agency would not have access to the pledged resources until the loan is repaid. This is a modification of ‘pooled fund bank’ approach as prevalent in the West. Our argument is that rather than have new institutions, the existing FIs can do the job, especially whilst transiting to the universal banking mode. There is a new mandate that needs to be given to such FIs. Thus a ULB will need to identify a stable and regular source of revenue (say octroi) and dedicate it to the servicing of debt incurred via the bond route

for payment of interest as well as the Principle (supplemented by direct returns of the underlying project). This will be unexceptionable and will be a statutory provision as passed by the elected representatives of the ULB. This will serve as an implicit guarantee and help float the bonds with some ease. Of course in all this, what is paramount is for the ULBs to continue to strive to get its house in order. Nothing is perhaps as important as the rationalization of property tax, to which we now turn.

IV.B Property Tax Initiatives by ULBs

This paper, as we have stated earlier, is situated in the context of growing fiscal constraints and the widening responsibilities faced by the local governments. Such constraints did not attract serious attention a few decades back but now it has become necessary to examine the associated problems and explore possible remedies. The growth of responsibilities, especially after the 74th Amendment to the Constitution, has left almost all local governments with virtually no room for curtailing their expenditures to correct for the fiscal crisis that most of them face. Therefore, over the last decade much attention has been focused on the need to identify different revenue raising options.

IV.B.1 The Economic Case for Property Taxation

Even though in theory one can list out numerous alternative means of raising revenues of municipalities, practical considerations impose some limits on what is feasible. The main responsibility of the municipal government is to provide goods and services to citizens within its jurisdiction so that the match between the preferences of consumers-citizens and actual provision is as close as possible. Municipal revenue should function not only as a means of raising funds but also as price of municipal services.

Where each individual can control the amount of municipal services he/she consumes, and where such consumption can be monitored and measured, user charges will do the job of raising funds and pricing much better than taxation. But where these conditions do not obtain, the case for user charges becomes very weak. For instance it will be extremely difficult to monitor a citizen's use of all roads provided by the municipality; isolated cases of tolls for use of roads are, however, possible. This is

because at least some of the services provided by municipal governments have "public goods" characteristic¹.

Consider, for instance, solid waste disposal. While some of the benefits accrue to the individual directly, the greater benefits are available from improvement in public health, which is available to all simultaneously. This is a situation known as an *externality* in economics, where individuals may receive benefits due to the consumption of the good by someone else. If the level of such services were limited to that determined by individuals' willingness to pay, the service would be under-provided. Only the government will be in a position to judge the total benefits arising out of the service and make arrangements for its optimal provision.

Services having public goods characteristics are best financed through taxation. It is not possible to measure each individual's consumption of the service and no individual will have the incentive to willingly reveal the benefits that he or she derives from the service. The amount of tax collected by the municipality must not only cover the cost of providing the service but it must also distribute its burden among citizens in relation to the benefit that they may derive from it. This is where the tax will even act as a price of the service and such a tax is often called a *benefit tax*. The incidence (the burden that is placed on the taxpayer²) of such a tax must correspond to the distribution of benefits it finances. A property tax performs this role better than other taxes. While the correspondence between burden of the property tax and the benefits received from municipal services is not perfect, there would certainly be a superior correspondence in the case of this tax than say an alternative such octroi.

¹ A "public good" (to be distinguished from a publicly *produced* good), as understood here, has two essential characteristics. (a) *Non-exclusion*: No person can be excluded from the benefits of the good even if he or she does not pay for it. (b) *Joint consumption*: the whole society can jointly enjoy the benefits of the good at the same time; in fact, for some goods, the number of individual beneficiaries can be increased without limit. The classic example is national defence. Any individual who resides in India automatically receives the benefits of its defence services without necessarily having to pay for these. Equally, if the population of India goes up from 900 million to 950 million, the expenditure on defence need not go up. Consequently, individuals can *free-ride*, that is receive benefits without paying for these. Since individuals receive benefits without having to pay for them, no market will provide for them. Only a government, since it can overcome the free-rider problem, provides these goods. The State can cover the cost of providing public goods by taxation. Failure to pay tax can be penalised since the State has a monopoly of *legal* violence, that is the power to inflict a jail term or worse, on an individual.

² It must, of course, be remembered that the burden of the tax may be shifted by a taxpayer on to someone else. In such a case the impact and incidence of the tax will be on different persons.

Arguments against the property tax have emanated from a consideration of its incidence on residential and non-residential property as well as from a distinction between short-run and long run effects of the tax. In the short run, buildings are supply-inelastic and hence there will be no change in the supply of buildings as a consequence of the tax. As far as land on which buildings stand is concerned its supply is fixed and imposition of a tax will not change its availability. The long-run effect of property tax may be different from its short-run effects. In the long run owners of buildings may respond to a tax by reducing investment in new structures, shifting resources from real property to other forms of investment, etc. This may lead to a distortion in the decision making of individuals and lead to inefficient allocation of resources.

The presence of a tax may also affect location decision of economic activities. It is logically possible that industry could avoid urban areas subject to heavy property taxation; in extreme cases established economic activity may even migrate out of heavily taxed areas. However, many economists are of the opinion that fundamental factors such as labour costs, market access, quality of infrastructure, etc. are more important than local tax burdens in determining location of economic activity (Ladd, 1998). In fact, one could well argue that a municipal body that better provides public goods and services, even if it has to impose property tax to finance this, would possibly attract investment to its jurisdiction.

In this context, the property tax, levied on the rateable value of immovable properties in municipal jurisdictions (the annual rental value – ARV– system), has aroused significant attention in recent times. Even though this tax can be a buoyant source of revenue it has remained stagnant over the years in most Indian cities. Further, given the way in which the tax is administered, it has been shrouded in controversy since it was felt that it violated the basic canons of taxation, specifically equity. Equity was violated in its administration since often properties, by and large similar, bore very different tax burdens. Various studies [Bagchi, 1997; AILSG, 1999] have suggested drastic reforms in the rateable value based property tax system in order to get rid of several lacunae.

IV.B.2 Annual (Rental) Value Systems

This system is most common in developing countries, which were British colonies, even though many cities, which employed this system, have started to move away from it. As is well known, in the annual value system the base is the expected or notional rental value of the property.

The major advantages of this system were put forward as follows (Angadi, 1990):

1. Adoption of the annual (rental) value system does not present any difficulty in respect of properties, which are usually found in large numbers in a city such as residential properties, shops, etc.
2. The annual letting value of a property automatically adjusts to the benefit that the owner derives from the public services provided by the municipality.
3. Rental values take into account aspects of a property such as locality, proximity to market or railway station, etc.
4. Rental values depend not only on the cost of the property but also on what the tenant is prepared to pay for it. Thus demand side of the market is important in the determination of rent.
5. Rental basis of valuation has the advantage of certainty as well as flexibility.

It was of course recognised that “expected or notional rent” that was the key element of this system was a figment of the imagination and it may not be possible to actually observe it in reality. In Delhi, for instance, the base has been “the annual rent at which such land or building might reasonable be expected to let from year to year, after allowing for certain deductions such as cost of repairs, insurance, etc.” (Bagchi, 1997). The laws dealing with property tax are typically silent on how “reasonable” rent is to be computed. It is of course well accepted in political economy, when the law is silent, the word of the law enforcer counts. It is apparent that such a situation will lead to enormous discretionary powers in the hand of the tax collecting authorities. The presence of discretion severely compromises rule based regulation and reduces transparency in the administration of the law.

Rent control constraints can severely restrict both the level and growth of assessed values of rent. Where rent controls lead to a divergence between market rent and legal rent landlords, possibly with the co-operation of tenants, but generally without it, devise means of recouping the lost value. The gap between market rent and legal rent is value that is contested by the parties to the transactions. Institutions like “pagri” or “key money” crop up. The actual level of rent is the controlled/legal amount plus the premium/pagri/key money³. This latter component is part of the rent but is generally illegal and hence is not reported. Naturally, it cannot be included in the base of property tax. Assessed values in such a situation can only grow with new constructions since controlled rents are rarely increased⁴.

Rent control acts have been devised to protect the welfare of the tenants against the deprecation of landlords. The effects of these acts, however, sometimes go in the opposite direction. Landlords, unable to extract full value of their property save on maintenance; tenants too have little incentive the property they rent. This leads to deterioration in the quality and value of the property, which sometimes has extreme consequences. It is no surprise that numerous house collapses take place in Mumbai in areas where rent controls have dulled the incentives to maintain property.

One other unintended effect of rent controls arises from the narrowing of the tax base. Since assessed values are much lower than market values, taxes on property yield very little revenue. This severely constrains the ability of municipal governments to provide public goods and services to precisely those citizens who the act was supposed to protect. The wealthy, on the other hand, can compensate for the shortfall in municipal services by accessing the market.

³ Innovative measures are sometimes used to capture the value between market and controlled rent. Cheung (1996) reports that in Hong Kong landlords “legally” sell the prospective tenant a chair or some such trivial item for a price equal to key money or pagri.

⁴ See, however, Arnott (1995) for a distinction between “hard” or “first-generation” rent controls and “second-generation” rent controls. Under the former, there is a freeze on nominal rents, a situation not uncommon with that obtaining in parts of Mumbai. Most of the textbook criticism of rent controls pertains to such hard controls. Second-generation controls on the other hand permit automatic percentage rent increases related to the rate of inflation.

The situation as it has evolved in the Indian context has been no different. Bagchi (1997) points out how various court rulings have led to a disastrous impact on the yield of property tax. It has been established that in judging what should be reasonable rent, the taxing authorities have to go by the concept of 'standard rent' in the rent control laws of the land. This became the upper limit for assessment. Further, in situations where the standard rent seemed too high and unlikely to be earned, the rateable value had to be judged on such lower rent. The base of property tax thus came to be confined for all practical purposes to the lower of standard rent or the rent reported to have been paid to the landlord. The effect that such ruling had on the collection of taxes needs no elaboration. However, what is not so apparent is the effect this had on equity. The standard rent on even for properties in the same locality with identical characteristics differed widely depending on the date on which they were let out or when their construction had commenced.

On balance, it appears that the working of the annual value system has been fraught with numerous difficulties and the prevalence of rent control act has made the its implementation even more vexatious. It has been suggested that rather than doing away with this system altogether and replacing it with a capital value system, it may be better to remove the impediments that obstruct its implementation. It has been suggested that it would be better to insulate the operation of the property tax from the provisions of rent control acts. However, this suggestion does not recognise the political economy aspects of the problem. Any amendment to existing rent control acts is likely to prove very difficult and would be opposed by a variety of interest groups. It would be appear that an alternative base of taxation would serve the purpose of raising revenues as well as proxy-pricing services provided by the municipality. This alternative is the capital value system.

IV.B.3. Capital Value Systems

The capital value basis is used mainly in the United States, South Africa and few European countries such as Germany, Austria and Denmark. Capital value is perhaps the most straightforward base for assessment of property tax: it is the price that the

property would sell for in the market (Keith, 1993). The tax base is defined as the assessed value of land and improvements or only as the assessed value of land under the site value version. Even though assessed value is understood as the full market value of the property the assessment ratio may vary in theory from zero to one. In practice, actual assessed value is always below market value due to infrequent assessment and poor assessment practices (Bahl and Linn, 1992). In most cases, drastic under-assessment is the rule rather than the exception.

Three important features of capital value rate structure distinguish them from the annual rental value systems. These are: the use of flat rates is more common, there is more frequent use of differential taxation of land and improvement and capital value structures tend to be complicated. There is greater concern under the capital value system than under rental value systems with the allocative (land use) effects of the tax. This is often reflected in the differential taxation of improvement versus land, improved land versus idle land and land in different locations in the urban area. The last mentioned i.e. different treatment of land in different location will find an echo in the system that is being proposed by the present study.

The strengths and weaknesses of the capital value system shows up in the following five features:

1. *Formula based valuation*: The assessment procedure is formula based and is often more complicated than the rental value system. The assessment procedure under the capital value system typically starts with a classification of land according to its location, amenities and/or use. Each class of land is then given an assessed value according to a comparative sales analysis. This is done by computing the average value for a small number of properties using mathematical techniques to establish relative property values.
2. *Separate Assessment of Land and Improvement*: Separate assessment of land and improvement makes possible the application of different assessment ratios and different rates of taxation. This provides greater flexibility to the administration in inducing allocative effects.

3. *Multiple Sources of Valuation Information:* Capital value assessment systems use a variety of sources of information to arrive at an appraised value for a property. Thus basic land information may be obtained from comparative sales records, real estate boards, self-assessment, etc. Improvement values are based on data provided by possibly government construction ministry or from private sector. In combining these various pieces of information the judgement of the assessor plays an important role in adjusting and combining these data.
4. *Provisions for Re-assessment:* The frequency for re-assessment of property varies a great deal across cities. Frequencies range from yearly (very rare), such as in Seoul, to every three years (Philippines) or once in five years (Nairobi). Determining an optimal frequency for re-assessment is governed by considerations of feasibility. Once a year seems too high a frequency for most jurisdictions. However, the more the re-assessment is delayed the greater becomes the discrepancy between assessed values and market value of the property.

IV.B.4 Proposed Capital Value System for Mumbai

Brihanmumbai Municipal Corporation (BMC) has also taken an initiative to explore the possibilities of rationalising its property tax structure. The BMC commenced its initiative with a study of an area-based rateable value model for its jurisdiction. However, working out suitable fiscal zones to capture characteristics such as location in the city, proximity to a main road/railway station/market/other infrastructure in a large city like Mumbai would be a formidable task. Inevitable, such a zoning system would be afflicted by arbitrariness and would not represent a significant improvement over the existing system. Consequently, the alternative system may not be as transparent as expected. In the light of the deficiencies of the area based model the BMC is currently actively considering an alternative, capital value based property tax model whose advantages have been noted in the literature.

An ideal tax reform procedure should take the existing tax structure, as its starting point and change should be slow and piecemeal. The BMC will have to take into account the effect of the change in the tax system on allocation of resources as well as on the redistributive impact of the change. For instance, a change in tax burden on

industry may result in the industry moving out of BMC jurisdiction over a long period. Further, differential tax burden on vacant lands vis-à-vis constructed properties may distort incentives in favour or against improvement of property. On the other hand, a change in tax burden on different sets of property owners may improve the welfare of one set at the expense of another. Such redistribution is inevitable but may lead opposition from aggrieved parties.

In study done by one of the present authors (TISS-UoM, 2001) for the BMC an alternative capital value based model has been developed for property tax in the city of Mumbai. In an earlier section we have already discussed the relative merits of the capital value system vis-à-vis the ARV system. Here we give a brief account of the proposed capital value based model.

In general, the process of operationalising the capital value system consists of the following steps [It may be noted that there may be local variations in the stepwise procedure listed below]

- (1) First, a sample of recent property transactions or construction data is analysed to identify the physical characteristic that appear to determine the property's value. As far as this study is concerned such data were made available by the BMC. Specifically, the data gave information on user categories, construction categories and age categories. Further, the market valuation of property of properties has been culled from the *Stamp Duty Ready Reckoner & Market Value of Flats in Mumbai (1999)*.
- (2) The contribution of each of the principal determinants of value is then quantified and reduced to a formula or, more often, a table. The research in this study has used econometric techniques, described below, to compute the contribution of each of the principal determinants of value; these have been called weights in the study.
- (3) This is then combined with base of taxation and tax rate to estimate the tax revenue. This step operationalises the formula and computes the tax liability of each property. This study carries out this step not at the level of individual properties but at aggregated levels, such age/construction/user categories or at the level of wards.

(4) The combination of the formula with the tax base and tax yield is then applied to information on the physical characteristic of each property in the jurisdiction's tax base, to yield individual valuations. This will be the task of the BMC as it applies the model to each property in its jurisdiction and begins the process of actually assessing the tax liability of each property.

There are numerous critical aspects of the step by step approach listed above. In step 2 the contribution of each of the determinants of value is codified as a weight. These weights come out of a statistical exercise in the first instance, but these may have to be fine tuned, keeping in mind existing practices so as to avoid a drastic change from the present system. The weights must conform to some basic notion of equity. This is where the judgement of the practitioner comes into play. In the third step the determination of the tax rate is also very important.

The model that has actually been employed in the operationalisation of the capital value system consists of the following features:

1. Tax Base: The tax base will be the market value of the property. This has been obtained from the *Stamp Duty Ready Reckoner & Market Value of Flats in Mumbai*. The market value of the property varies by location and hence locational factors are implicit in the tax base.
2. Area: The next element in the model is the carpet area of the property measured in square metres.
3. Construction Categories: The type of construction plays an important role in the determination of the value of the property. We have employed four construction categories. These are as under

CLASSIFICATION OF CONSTRUCTION CATEGORIES

Construction Category	Construction Type
C2	Semi-permanent structures
C3	Chawls
C4	RCC structures without lift (usually up to 4 floors)
C5	RCC structures with lift (usually more than 4 floors) and Bungalows

4. User Categories: Properties have also to be distinguished by user category. We have made use of six user categories.

CLASSIFICATION OF USER CATEGORIES

User Category	Broad User Type	Detailed User Description
U2	Residential	
U3	Industries/ Factories	Tuition classes and computer classes, nursing homes, Factories including workshops, Laundries, Oil installations, Printing press, Refineries, Pvt. Swimming pools, Clubs, Gymkhanas, Industrial estates, Mills (Textiles, Silk, Flour, Oil) Godowns and Tanks for industrial use, Drama theatres, Marriage halls, Stadiums, Service stations
U4	Shops	Shops, Credit societies, Co-op. Departmental stores (Apna Bazar, Shakar Bhandar), Petrol pumps, Cinema houses, Studios, Ordinary lodging-boarding, Other non-residential property not covered elsewhere.
U5	Offices	Offices in less prominent area, Other hotels excluding ordinary lodging-boarding
U6	Hotels (4 Star or lower) and Offices	Four star hotels, Banks (Co-op, schedule banks excluding credit societies, Air-conditioned markets, Shopping complexes, Commercial/administrative office buildings in commercial locality, Departmental stores excluding Co-op department stores
U7	Hotels (5 star)	Five star hotels, Banks (excluding credit societies and co-op banks)

5. Age Categories: This is the last set of categories that will play a role in the model. The categorisation of Age is as follows:

CLASSIFICATION OF AGE CATEGORIES

Age Category	Year Of Construction
A1	Pre – 1940
A2	1941 – 1960
A3	1961 – 1970
A4	1971 – 1985
A5	Post – 1985

6. Rate of tax: This is the final element of the model.

The model proposed in this report can be stated as follows:

$$T = r*(MV)*AREA*C*U*A$$

where,

T = Tax revenue

r = Annual Rate of tax

MV = Market value of the property

AREA = Carpet Area of the property in Sq. Mt.

C = Weight associated with construction category

U = Weight associated with user category

A = Weight associated with age category

Once all the elements of equation 5.1 are in place, the Municipal Corporation can then begin the task of actually computing the tax liability of each and every property within its jurisdiction. In fact, the system is so transparent that each property owner will be in a position to compute his or her own tax liability.

Since the tax base of the model is capital value, which is usually a large monetary value, the rate of tax under capital value systems tends to be very small. For instance, as per the computation of this study, for the BMC to earn under the new system exactly the same quantum of tax that it is currently earning under the ARV

system, the rate of tax will have to be as low as 0.20 percent. In comparison, the various problems associated with ARV tax systems, notably the small base and the lack of buoyancy in the base, has meant that the only way to increase property tax revenues was to hike the tax rates: tax rates have gone up to as high as 185 percent. Since the capital value system is market driven – being based on the value of the property in the market – it is naturally buoyant. In addition, marginal increases in the rate of property tax will yield large revenue increases to the ULB. Thus the new system has much to recommend itself and it can become a very useful avenue for augmenting the resources of ULBs.

IV. Conclusion

There is a clear need to take up urgent measures to squarely face the issue of Urban Infrastructure. That there is a severe lack of it needs no emphasis. Whilst there may be several ways of provisioning the requisite finance, in this paper we have emphasized the problem from the especial point of view of the ULBs. This is pertinent because of the context provided by the 74th CAA. In exploring different avenues to provide for infrastructure finance, we have focused on two.

The first deals with what may be called the financial product and the banking initiative. The paper lays down the sketch for what needs to be done by the policy makers in the financial sector as well as by the ‘CEOs’ of the ULBs. The second deals in considerable detail the rationalization /switch over of one of the crucial taxes viz., the property tax. We believe that there is a clear and present urgency about the issues treated in this paper. Addressing and tackling them will require considerable policy initiative and much political will.

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