TOWARDS ECONOMIC EMPOWERMENT OF ULBS IN MAHARASHTRA

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WORKING PAPER NO. 15

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ABSTRACT

Scarcity of resources for urban infrastructure is a universal concern in developing economies. Also, prudent mandate of macroeconomic management has led to a reduction in hand-downs from higher governments. The sub-national governments have had to look at several alternatives with a sense of urgency. In this paper we focus on the possibilities of the sub-national governments to access the financial markets in general and debt market in particular. Our paper focuses on the need to create virtual entities –self help groups amongst ULBs – that could expand the domain of eligible ULBs. We visualize a scheme for capital market access by ULBs, which would work without the state acting as an intermediary and also without any new institution being set up. We provide the theoretical underpinnings, illustrate and operationalise the idea with the help of data related to ULBs in the state of Maharashtra.

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1. Introduction

An increasing pressure to make governments at all levels more accountable and more sensitive to the demands of the marketplace accompanies the move towards decentralization in governance and fiscal decision-making. In the face of limited resources there is an urgency to make activities self-supporting, to curb the provision of free services by refocusing on essentials, and rolling back the state from services that the private sector can provide better. A crucial issue related to devolution of responsibility and fiscal resources from the center to sub-national governments – apart from the enabling legislative changes that are called for – is that of increasing the access of sub-national governments to financial markets, and the securities markets for investment in infrastructure. Raising capital for investment in infrastructure facilities is a universal concern in developing and transitioning economies. Also of crucial importance is the need to build capacity for proposing bankable projects by the ULBs. The significance of these facilities for building competitive economies can hardly be overemphasized.

This paper focuses *on the possibility of the sub-national governments accessing the financial markets in general and debt market in particular. We focus here on the need to create virtual entities –self help groups amongst ULBs – that could expand the domain of ULBs eligible to access the credit market. We illustrate and operationalise the proposed scheme with the help of data pertaining*

to ULBs in Maharashtra. The paper is divided into five sections including the introduction. Section 2 gives an overview of the finances of the ULBs in Maharashtra, and draws attention to some known sources of revenue generation. Section 3 briefly looks at the Indian experience of sub-national borrowing in the capital market. Section 4 suggests a methodology and provides illustrations for operationalising a new idea that is the main theme of this paper. Finally, in section 5 we conclude.

2. Finances of Urban Local Bodies in Maharashtra: An Overview

Revenues of ULBs can be broadly classified as revenues from *own sources* and those from *external sources*, such as grants from the state and loans. Again, own sources of revenues can be categorized as *tax revenues* and *non tax revenues*. There are specific provisions in the state Acts, regarding taxation powers of the ULBs. Article 243X of the Constitution, inserted after the 74th Constitutional Amendment Act (CAA) envisages, that states should devolve additional taxation powers to ULBs, so as to make them financially competent for discharging the added functional responsibilities, mandated by the succeeding Article 243W. However, in Maharashtra, there has been no such devolution of taxation powers, which would have been expected since it would have been in consonance with the process of decentralization. Instead, we have seen that taxation powers of small ULBs regarding octroi have been withdrawn by the state in March 1999. Hence, the taxation powers of the ULBs are limited to its traditional sphere and have not gone beyond various existing provisions in the state Acts.

What is important to note in this context is that even within the list that delimits the taxation powers of ULBs, there are provisions in the state Acts that further reduce the flexibility of the ULBs. This has been illustrated in the case of property tax. Karnik et. al. (2004) point out the Municipal Corporations in Maharashtra can levy property tax as a percentage of annual ratable value of the property, and ceilings for such percentages are laid down by the state in three different Acts. Bombay Municipal Corporation has no autonomy regarding the

components and rate for each component of the tax, while Nagpur has limited autonomy. All other MCs (governed by BPMC Act) have autonomy regarding the rate of tax in case of components related to water supply and sewerage only. However, *there is no freedom to any MC regarding inclusion of any new component or changing the tax base to some other, say, area.*

The important point that we wish to make here is that the power of ULBs in Maharashtra appear to be *highly restricted with respect to both, the tax and the non tax sources of revenues, which constitute their **own** sources*. This has forced the ULBs to be dependent on the state for their finances. These constitute external sources of finance, which complement the own sources of ULBs. However, *grants from the state are not devolved by objective or fair principles but are ad hoc in nature.*

Thus it would appear that revenue growth of the ULBs has been constrained by such inherent structural bottlenecks like, limited autonomy regarding taxation, small bandwidth for non tax revenues and unpredictable nature of funds flowing from the state. The problems faced by ULBs have been worsened by the fact that the 74th CAA has further added to the list of services to be performed by local bodies. As already noted, the functional devolution to the ULBs not being matched by supporting financial devolution has lead to *too many responsibilities chasing a narrow resource base.* The problem is further aggravated by the stipulation in the Municipal Acts that ULBs *must balance their budgets.* The plethora of contraints on the ULBs has made assessment of their functioning difficult: It is difficult to establish whether non-performance represents dereliction of duty or inability to perform due to lack of funds. Tabulated below is the share of grants and major sources of own revenue in total income of municipal councils and corporations.

TABLE 1
INCOME OF MUNICIPAL CORPORATIONS AND COUNCILS

	Income Categories as % of total income			
	own source income	govt. grants	octroi	Taxes on Houses and Land
1999-00	55.86	11.14	36.25	15.40
2000-01	55.17	11.28	34.88	16.19
2001-02	52.66	10.15	30.08	16.52
2002-03	49.05	9.06	30.88	13.08

The salient points that emerge are the following:

- Grants from the state government as a ratio to total income show a declining trend.

- Of the own sources of income, the share of octroi has been the highest. It has registered a gradual decline but still comprises the largest share of own income.

- The share of taxes on housing and land was 15.4 percent in 1999-00. This too shows a declining trend.

- Own income as a whole as percent of total income comprised 56 percent in 1990-00. This has shown a steady decline and stood at 49 percent in 2002-03.

The point that we would like to emphasise is that given the resource crunch faced by the government, the ULBs cannot help but *depend on themselves (singly and collectively) for resource mobilization* in the foreseeable future if *de facto* decentralization has to occur. Some much discussed alternative sources of revenue that could be explored for improving the finance of ULBs are briefly discussed in the sub-section below (see Karnik et. al. 2002 for greater details).

2.1 Improving the Finances of ULBs: *Internal Resource Mobilisation*

Improving overall finances of the ULBs in general would involve various steps like:

➢ Prudent management exercise

➢ Spending of resources on appropriate items

➢ Cutting costs

➢ Minimizing unproductive expenditure by spending on identified priorities,

➢ The selection of appropriate low cost technologies

➢ Proper maintenance and timely replacement of exhausted infrastructure

➢ Private sector participation

➢ Identification of socially essential subsidies and elimination of inessential ones.

ULBs would need to improve on both fronts viz. *improve implementation of existing sources* of revenue and *tap new sources.* A major source of tax revenue for the Municipal Corporations is *property tax.* The recovery percentage of property tax, in its present structure is around 60 to 65 percent, in case of Corporations and between 40 to 50 percent, in case of Municipal Councils. Hence there is a considerable scope for further improvement. Some less explored alternatives would include:

✓ *Land* can be looked upon as a major resource available (Jha and Siddiqui, 2000). It can attract good income without any other financial support. Development of precious real estate can be a lucrative source of income for a local body.

✓ The concept of *"Floor Space Index (FSI) Bank"* can be also developed. The regulations of the ULB could stipulate a certain level of FSI normally

available in a locality and the excess FSI could be purchased at a premium from the FSI Bank created by the ULB. Evidently, there would have to be a cap on such use of FSI bearing in mind the ability of the city to absorb additional construction and provide for city infrastructure.

✓ *Transferable Development Rights* can also attract handsome revenues to the ULB. If the ULB intends to take over a plot of land for public use the owner's ability to build on that land is taken away. Traditionally, the land owner was compensated through payment of acquisition money, but under TDR, it may allow him to use the construction potential on some other plot. If the landlord does not own an alternate plot, he can sell the TDR, to anyone who wishes to use it. Hence, ULB's finances can be bolstered and the TDR concept can prove to be a good tool, not merely for land acquisition, but also for getting public works executed.

✓ Other possible sources for revenue generation can be *pay and park* facilities, *fees from recreation* facilities like gardens, swimming pools etc.

Tapping some of these potential sources of internal revenue, would undoubtedly lead to improvement in the fiscal health of ULBs. It may be worth re-emphasizing that rationalizing the user charges would help in getting a better rating for the ULBs. However, the *needs of urban sector are huge* and *accelerating*. Greater resources must simply be forthcoming (devolved or raised). *Improving on existing sources of revenue and looking for newer alternatives such as those suggested above are certainly necessary but cannot be sufficient. Hence, it is our view that recourse to capital market has become unavoidable.* It is in this context that we put forth a scheme that would enable the relatively weaker ULBs to access the capital market. This is extremely crucial from the view point of the **inclusive** developmental agenda of our country. Before we elaborate on our scheme, it would be interesting review the experience thus far of sub-national borrowing from capital market.

3. Sub-national Borrowing from Capital Market: Evidence from India

The existing and widening resource gap has made it almost imperative that direct access to capital market be accepted as a viable option of fund raising by municipal bodies. However, access to capital market requires financial discipline and acceptable credit rating. The appeal of credit ratings is clear: they provide a third-party opinion by experts that informs investors without the skill or resources to carry out their own investigations, of the relative creditworthiness of competing investment opportunities. In India a welcome trend noticeable is that an increasing number of municipal bodies are showing an inclination to get a credit rating. CRISIL, CARE and ICRA are the three credit rating agencies currently functional in India.

Tapping of the capital market for long-term investment in the infrastructure sector is a relatively recent phenomenon in India. Most of the tapping of capital markets in India has been restricted to projects that come within the jurisdiction of higher-level governments. The use of capital market funds for financing basic amenities is still at an early germinal stage. Financial Institutions' Reform and Expansion Programme – Debt component/infrastructure (FIRE-D) is an important initiative in this context. Bagchi (2001) has identified factors under the broad heads of economic, structural and institutional, which have acted as impediments to extensive use of capital market funds.

One success story of a sub-national government accessing the capital market in India is that of Tamil Nadu. In 1996, with the aim of achieving managerial efficiency and attracting private capital to urban infrastructure, the Municipal Urban Development Fund was converted into an autonomous financial intermediary—the Tamil Nadu Urban Development Fund (TNUDF). The new entity was established as a trust fund with private equity participation—the first public-private partnership in India providing long-term municipal financing for infrastructure without state guarantees. Eligible borrowers include urban local bodies, statutory boards, public undertakings, and private corporations. Eligible sectors include transport, sanitation, water supply, solid waste management,

integrated area development projects, roads and bridges, and sites and services (Sood, 2004).

At the local body level, capital markets have been tapped via *municipal bonds*. Ghodke (2004) documents the history of municipal bonds in India. Bangalore Municipal Corporation's issue of Rs. 125 crores, with state government guarantee in 1997 marked the beginning of fully market based system of local government finance in India. This was followed by the Ahmedabad Municipal Corporation accessing the capital market without state guarantee. Subsequently, municipal corporations of Nashik, Calcutta, Ludhiana, Nagpur, Madurai have all issued municipal bonds *but not without the support of state government guarantees*. However, the size of the municipal market leaves much to be desired. Ghodke (2004) observes that of the Rs. 407 billion raised in the capital market in the country in financial year 2003, ULBs have accounted for a mere Rs. 607 crore.

The experience so far shows that only bigger municipal corporations are in a position to take the advantage of the resources available in capital market. Medium and smaller municipalities are unable to do so due to weak financial position and lack of capacity to prepare viable project proposals. In order to enable the smaller municipalities to look for alternative source of funding for their bankable projects/schemes, a state level *Pooled Finance Development Scheme* has been set up. The scheme is meant to provide credit enhancement to access market borrowings on a creditworthy basis. The main objectives of the mechanism being proposed are:

(i)   Facilitate small and medium size ULBs to access capital market for investment in essential municipal infrastructure

(ii)   Facilitate development of bankable urban infrastructure projects

(iii)   Facilitate introduction of necessary reforms (e.g. tariff and financial) in the ULBs.

(iv)   Facilitate development of Municipal Bond market.

Draft Guidelines of the scheme have been approved by the Minister for Urban Development and Poverty Alleviation and are at present under examination. A tentative allocation of Rs.400 crore under the 10th Annual Year Plan has been made for the Scheme. A provision of Rs.80 crore has been proposed in the Annual Plan of 2003-04 for the scheme. (see http://urbanindia.nic.in/mud-final-site/urbscene/urbanreform.htm

and http://urbanindia.nic.in/mud-final-site/programs/index.htm).

Given the context, the focus of the present paper is to try and illustrate an idea that in a sense is a *modified version or an extension of the Pooled Fund Scheme*, which would work to the benefit of small and medium sized municipalities that have so far been unable to access the capital market. *This entails working out intra-group contract incentives*. The proposed methodology has been illustrated for the state of Maharashtra in the section that follows.

4. Our Scheme: Methodology and Illustrations

This state level Pooled Fund scheme being proposed in India is along the lines of the "Bond Bank" scheme prevalent in the U.S. In the late 1960s the state level bond bank concept emerged in the U.S. to support the borrowing by smaller municipalities which otherwise find it difficult to tap the capital market. A bond bank is a state sponsored intermediary that borrows from the capital market and then lends to small municipalities either by subscribing to their bonds or by direct lending. The issuers benefit from lower administrative costs that are spread among a large number of borrowers. Pooling of credit also results in a higher overall credit rating for the issue as the credit risk is diversified among a broader range of municipalities. The bond banks are self-sustaining and charge the municipalities a fee for their service. *This U.S. version simply dos not go far enough since it leads to veritable cherry picking that is not in consonance with the developing status of our country nor with the inclusive form of developmental agenda that we have mandated for ourselves.*

The scheme that we would like to suggest would extend the existing concept and yet, *which would work without the state acting as an intermediary*

and also without any new institution being set up. We believe that the existing financial institutions can do the job with *enabling legal and regulatory provisions*. Our scheme would provide incentives for not only the best of the ULBs to come together and access the capital market, but also demonstrates that strong and relatively weak ULBs too could come together an obtain a credit rating as a 'Virtual' Entity. Needless to say that such a coalition would emerge *only if it gives to each partner at least as much as it would have got if it had independently accessed the market*, i.e., that the standard imputation conditions apply. The scheme proposed here shows that such incentives could indeed be built into the system.

4.1 Theoretical Underpinnings

In this section we elaborate on the theoretical underpinnings of the our idea/scheme scheme that we have been discussing. First we consider the space of ULBs which for the universal of discourse for the purposes on hand. This set will need to be partitioned in three sub-classes, viz., one that has ULBs that are 'good' then those that are not very good but those that have some redeeming features and finally those ULBs that are – in a sense – beyond repairs. In order to rank the ULBs there would be a set of criteria that provide the filter for such a categorization. Formally therefore we have the following:

- ✓ Let U_i (i = 1….N) denote the N urban local bodies. In a specific case these may be municipal corporations or A,B,C municipal councils. In this general framework we make no such distinction.
- ✓ We use 'L' different criteria, not necessarily of equal importance in order to gauge the rating / ranking of ULBs.
- ✓ We use a two stage filtering strategy to categorise the entire set of ULBs into THREE exclusive classes, U(I), U(II) and U(III).
- ✓ As the first stage filter we use *Per Capita Revenue Surplus*. All ULBs with a revenue surplus gives us the first of these classes viz., U(I) whom we shall denote as "CHERRIES".

- ✓ Within the category U(I) we could use some stricter criteria and obtain a subset which denote as "SUPER-CHERRIES". This is simply an illustrative mechanism of picking the *Best of the Best*. This is strictly not essential to our argument.
- ✓ All the ULBs recording a Per Capita Revenue Deficit define a joint set of {U(II) $\cup$ U(III)}.
- ✓ To distinguish U(II) from U(III) we make use of second stage filtering strategy. In our exercise we have identified three criteria for this purpose, which we discuss in the next section.
- ✓ We then define a benchmark for each of these criteria and from {U(II) $\cup$ U(III)} we identify U(II) as being those which pass the test for at least one criteria. The U(II) group is then '*Best amongst the Worst*' and are termed as "SALVAGABLES".
- ✓ All the revenue deficit ULBs which fail the test for all three criteria are the U(III) group and are termed as "DUDS". The ULBs in this category need direct intervention and/or support by the state to strengthen them enough so that "they may be able to walk on their own steam".

Let us now briefly talk about the different financial instruments (I_j) that could come into play. One could off-hand mention some such as on lending by a FI, muni-bond (specific to ULB or project), general or structured debt obligations or pure vanilla or indeed some derivative. Obviously the choice of any one or more of the instruments depend on the funding agency, as well as the ULBs that come together for the purposes of raising resources and the type of projects that are being contemplated. *The general theoretical precept here is that the normal sequence is from junk bonds to loans to investment grade bonds.* Obviously, we are not interested in junk bonds that can be issued by the institutions that have a poor financial health. Being concerned here with public bodies, such junk bonds are not advisable and indeed our argument has been that in such cases (especially in the extreme), the state has to intervene in a direct fashion and in a decisive way to help such ULBs to get out of the rut that they find themselves in,

in the process redefining the role of the state. The loan exposure is already in existence and has been increasing in importance for all categories of ULBs. However, the *loans do not constitute bank exposure to the extent feasible has been argued by us elsewhere* (see Pethe and Ghodke 2002). In that paper we have underlined the scope and suggested measures towards remedying this situation. In this paper however, the focus is on the third category viz., investment grade municipal bonds. In the Indian case, the institutional framework is already in place for IPOs and this has been successfully exploited in several cases. *The point is that unless this is extended to general public offering where individual investors are incentivised to bid for and hold this paper, we would not be able to fully exploit the potential of this avenue. It is also common knowledge that one of the necessary conditions for this to happen is the existence of vibrant secondary market in this paper.*

The literature on bond issue/market/pricing is common knowledge in literature. Obviously, the credit rating of the bond issuer (ULB for us) is a crucial input in deciding on the premium. The size of the issue is also important and it is pertinent to point out that there are obvious economies of scale to be reaped. The significance of this rather obvious observation is that – with some regulatory changes – it may be possible for a ULB to go in for an issue size in excess of its immediate requirement and use the excess cash profitably for onward lending to ULBs or indeed to finance a project – by way of an extension – of another ULB and reap technological economies. All this of course is contingent on the particularities of the type(s) of projects under consideration.

Broadly, the set of Universe of projects $\{P_k\}$ can be loosely sub-divided (say) into P(I), P(II), and P(III). Among these P(I) will be comprising of projects whose purpose is to supply goods that are in the nature of basic amenities. These would normally be made up of goods with overwhelmingly pure public good characteristics. The second class P(II) will have projects that deal with 'merit' components and acceptable 'marketable' characteristics. Finally, the third class P(III) will be 'almost pure' market goods that have conventionally been produced/provided by ULBs. There is of course another way of looking at the

classification. This has to do with the underlying production technologies and the efficiencies to be reaped through scale effects. Also, one can categorize the projects depending on whether space (i.e., contiguity for implementation) is a consideration. But the latter two categorizations are not immediately relevant. Finally, there is an aside that is nevertheless important. The generation of identification and proposing of bankable projects is a special skill that requires considerable capacity. It is usually the case that such capacity rarely exists with 'weaker' ULBs. Whilst this provides a long term agenda for capacity building efforts, in the shorter run, this is one more reason why the different ULBs (Strong and weak) need to come together to make a headway.

The first mentioned classificatory scheme now allows us to make further headway. To begin with, let us recall that the current ethos requires 'everyone' (individually or in a self-help mode) to stand on one's own feet, as far as possible. This, of course presumes that they have the basic wherewithal to do so. If not, then it becomes the duty of the state (external agency in general) to push the agent/institution to the threshold level. *Such considerations then allow us to redefine in a focused way the role of the state mandated to fulfill a developmental agenda. Thus, $\{U(III), P(I)\} \mapsto G^N$ signifies the new role mentioned above. What it implies is that instead of spreading the already scarce resources thinly, one should clearly demarcate the specific objectives as well as institutions and help them in a bigger way so as to make a critical difference in allowing the ULBs to cross the threshold mentioned above.* As far as P(II) and P(III) type projects are concerned, it follows that in case of the former, there is a clear need for rationalization of user charges so that at least the operation and maintenance (O&M) charges are covered and in the latter case, full cost principle be applied or indeed some form of privatization be brought into play.

To recap what we have, is a partitioned universe of ULBs with each ULB being ranked on the basis of certain criteria and then partitioning them into three mutually exclusive and exhaustive subsets viz., the CHERRIES, the SALVAGEABLES and the DUDS. In the Western model, the FIs will look at only the CHERRIES as they alone will have the required 'rating' based on the bank-

ability of the projects and the credit risk of the institution for the purposes of getting loans or issuing debt. Whilst this is the 'safe' and 'prudent' way, given our situation and the developmental agenda, this is clearly not enough. Thus such a narrow approach will not do in a developing country like India as the extent of 'CHERRIES' may not be sufficiently dense. Hence, there is a need to extend the concept of pooled fund banks so that even some of the 'relatively good' laggards come into reckoning and we are able to make a dent on the serious problem of urban amenities/services.

We now turn to illustrations with the help of data related to ULBs in Maharashtra as to how the extension may be brought about, focusing on the 'bond' or 'direct lending' route. We begin by acknowledging that such an exercise is slightly 'futuristic' in that several preconditions have to be met:

First, there is the intangible but crucial matter of mind set change so far as all the parties are concerned.

Second, legal/regulatory changes of an enabling nature need to be addressed (including granting the status of government paper with concomitant tax concessions to the ULB bonds and allowing ULBs to close suitable contract amongst each other and with the funding/underwriting agency).

Third, a thriving secondary market (and not just IPO which already exists) for muni-bonds must come into being.

Our empirical illustration tries to demonstrate the following cases:

Case 1: U_1, $U_2 \in U(I)$ come together to form a virtual entity V_1 such that $NPV(V_1) = \alpha$. We then have to argue why such a coalition formation is feasible and utility enhancing at the aggregative level as well as at the micro level for all concerned (imputation problem).

Case 2: We illustrate the formation of the virtual entity V_2 made up of U_1 and U_2, where $U_1 \in U(I)$ and $U_2 \in U(II)$ and consider the same problem as in the earlier case. This case is particularly important in that it represents a cross over

possibility, underscoring the development argument for 'conceptual extension' made earlier in the paper.

It needs to be argued why such coalitions provide incentives for intra-contract. Various arguments have to be made based on scale and portfolio principles. There are also reasons based on technology and contiguity and arbitrage. It is quite well known – from elementary finance literature – that through construction of portfolio the risk associated with the portfolio is pegged at a level that is less than the weighted sum of the individual risks of the components that go to make up the portfolio. In standard symbols this can be formally written as: $\sigma (V_1) < w_1 \sigma (U_1) + w_2 \sigma (U_2)$. The implication, in our case is that *the virtual entities will be able to get access to credit/bonds at easier terms than individually*. Thus when both the ULBs coming together are strong, there is still an incentive for them to come together. But more pertinently, even when one of them is weak – due to high risk associated – there may be a case for them to come together when the composite risk is acceptable for the purposes of credit disbursement i.e., $\sigma (V_1) < \alpha$ **and** $\alpha < \sigma (U_2)$, where α is the acceptable level of risk for lending or debt issue. Here of course the imputation problem becomes crucial for creating an incentive for the stronger ULB to join the coalition. In both the cases mentioned above, all the concerned parties in a Pareto improving way may share the resulting 'spoils' through bargaining and contract setting. The other aspect has to do with the fact that there are overheads involved in the process of incurring debt, with the obvious implication that going for large loans or bond issue will be rather more cost effective, *after all the cost argument of the supply function of loans or bonds is, ceterus paribus, monotonically inversely related to the quantum involved*. These and other scale economies provide an important economic rationale for going in for collusion between ULBs. The scale economies can also be rationalized from technological angle in fairly obvious way. The argument of spatial contiguity will depend on the particularities of the specific projects involved. All this of course presumes that there is a possibility (enabled by regulatory/legislative) of reaping arbitrage gains. We now turn to empirical illustrations.

Empirical Illustrations: The Bench Marks

A total of 238 municipalities were considered for the year 2000-01. The district of Jalna was left out on account of lack of availability of relevant data. Since the exercise is purely illustrative any such data problems will certainly not vitiate our results. Also, we chose to keep the city of Mumbai out of the sample considered. Results obtained by including and excluding Mumbai city have been found to be markedly different (See Karnik et. al. 2002). Inclusion of Mumbai would have certainly influenced our illustration as the benchmark norms would have been significantly different.

➢ At the first stage we have identified our "CHERRIES" as being those ULBs, which show a revenue surplus. 90 such ULBs have been identified. The per capita revenue surplus for these show a wide variation and range from a minimum of Rs. 0.49 to a maximum of Rs. 13920. These belong to the U(I) category.

➢ A sub-set of this, the "SUPER-CHERRIES" have been picked – in an *ad-hoc* manner – as those, which show a per capita revenue surplus exceeding Rs. 1000. Seventeen such SUPER-CHERRIES were identified.

➢ The remaining ULBs i.e. all revenue deficit ULBs (148 in number) belong to the joint set of {U(II) ∪ U(III)}.

➢ The second stage filter is then used to distinguish U(II) from U(III). For this three criteria are identified:

(a) Dependency Ratio (DR): This in a sense is representative of overall fiscal balance. We have adapted the measures that have been proposed by the Reserve Bank of India (Pattnaik. et. al, 1994) for evaluating the fiscal performance of Indian states. This measure gives an indication of the dependence of a ULB on resources (such as grants) from a higher level of government. This is defined as:

DR = (Total Expenditure – Own Income)/Total Expenditure

(b) *Administrative Expenditure (ADMIN)*: Apart from overall performance, a local government must be efficient in providing services i.e., public goods, to the citizens. The ability to provide such services will be severely compromised if expenditure on administration eats up a large part of the resources available to a local government. Consequently, we need to devise an indicator that will penalize a ULB for spending excessively on ADMIN to the detriment of public goods provision. Before giving the formula for ADMIN let us enter a caveat. The level of dis-aggregation currently available does not allow one to bifurcate between good and bad parts of administrative expenditure, so that we end up overestimating the wasteful expenditure. Thus, the proxy indicator, to that extent may suffer from lack of sharpness. The indicator that we use is given by:

ADMIN = (Expenditure on administration expenditure)/Total Expenditure

(c) *Public Goods provision (PUG)*: This indicator rewards an ULB for relatively higher spending on Public Goods. It is clear that higher spending on public goods need not necessarily lead to better service delivery. However, in the absence of adequate information on actual service delivery, there is no option but to use spending patterns on public goods as a proxy for performance of the primary duty by the ULB. Public good as defined in our study is a somewhat broad definition including education, sanitation, fire brigade, water supply, roads and street lighting

PUG = (Expenditure on public goods)/Total Expenditure

➢ Having settled on these three criteria we need to define a benchmark of acceptability for each of them. For illustrative purposes we defined benchmark for these criteria as the *actual average values for each of these criteria in case of the CHERRIES*. This benchmark admittedly suffers from the obvious limitations of a mean statistic, and hence could perhaps be

appropriately fine-tuned. Specifically, the benchmarks obtained for each of these criteria are:

TABLE 2

BENCHMARK FOR IDENTIFYING U(II) (AVERAGE OF 90 CHERRIES)		
DR	**ADMIN /TE**	**PUG/TE**
55	33	28

➤ All the ULBs which passed the test in *at least one of these criteria* are identified as elements of U(II) or the "SALVAGABLES" i.e.

(a) [DR] < 55 (lower the dependency ratio, better the ULB performance)

(b) [ADMIN/TE] < 33 (lower the expenditure on administrative services, better the ULB performance)

(c) [PUG/TE] > 28 (Higher the expenditure on public goods, better the ULB)

➤ We identified 19 ULBs that failed in all three criteria i.e. DUDS. These are the ULBs that need **enhanced and direct** state intervention for undertaking P(I) type projects thereby operationally redefining the role of the state.

➤ Having obtained our three mutually exclusive classes of the CHERRIES, the 'SALVAGEABLES' and the 'DUDS' we then proceed to construction of the virtual entities V_i and the NPVs which these coalitions and individual ULBs could raise.

Illustration 1

The virtual entity in this case is such that $V_1 = U_1 \cup U_2$ where $U_1, U_2 \in U(I)$

TABLE 3

Name of the District	Name of the ULB	ULB Class (as per 2001 census)	ULB type	Revenue Surplus	NPV
Thane	Navi Mumbai	E	Cherry	422255	*1922931*
Thane	Thane	E	Cherry	365559	*1664740*
Virtual entity = (Navi Mumbai + Thane)				787814	*3587671*
NPV has been computed for 50% of the revenue surplus at 7% rate of interest for a period of 15 years.					

In this illustration Navi Mumbai and Thane are both our "CHERRIES" i.e. they are revenue surplus and they also pass the test for all our three criteria. Clearly, if they come together and pool in their assets the virtual entity, which is a combination of the two will have a superior credit rating and a higher revenue surplus and therefore a higher NPV of the loan raised. A coalition of two such ULBs is obviously beneficial to both on scale as well as – in this case – on contiguity argument. Two points to be noted here, one, that they are now able to access together a quantum of funds that are greater than what each one could have therefore given that they had the same credit rating, the gain to be made is by borrowing large amount resulting in economies of scale from the side of the FI (say Bank) or the issue of debt side (arising mainly out of reduction of transactions costs. This means that they can go for large technology projects or use the left-over resources for further on-lending (should the regulations allow) to slightly weaker and smaller ULB and making gains from such a financial trade. Two, noting that the two ULBs are contiguous, it may be possible to go for large spatial projects than would lead to delivery of service that in a broken form would be costlier to provide.

Illustration 2

This illustration is a variant of the first and still considers a coalition of the CHERRIES. In this case, however, one of them is a "SUPER-CHERRY" i.e it conforms to our stricter norm of having a per capita revenue surplus exceeding Rs. 1000. It may be reiterated that there is nothing sacrosanct about this number. It is merely an illustrative mechanism of picking the "Best of the Best".

TABLE 4

Name of the District	Name of the ULB	ULB Class (as per 2001 census)	ULB type	DR	ADM /TE	PUG/TE
Thane	Ambernath	A	Super-Cherry	76.56	41.12	23.20
Sangli	Sangli Miraj Kupwad	E	Cherry	11.54	15.13	36.90
vitual entity = (Ambernath + Sangli Miraj Kupwad)				32.44	23.48	32.50
The passing norms for ULBs are (a) DR < 55.07 (b) ADMIN/TE < 33.22 (c) PUG > 28.03						

In this example we find that although both ULBs are CHERRIES, Ambernath independently fails to satisfy our benchmark norms for each of these criteria despite being a SUPER CHERRY. If it comes together with Sangli Miraj Kupwad, passes in all of these criteria, then the coalition of both these ULBs passes the test on all three criteria and therefore qualifies for a superior rating and a obviously a higher NPV of the loan raised. Note in this case the two ULBs coming together are not spatially contiguous and this will condition the type of projects that can be financed through such pooling.

Both Illustrations 1 and 2 serve to prove the point that the interests of the better ULBs would be better served if they were to collude with their counterparts and access the debt market as a virtual entity. In a way the two illustrations serve

to operationalise the Pooled Fund Scheme somewhat along the lines of the 'western' model.

The modified version that we would like to argue for as being more suited to a developing nation like India is that the 'SALVAGEABLES' (i.e. those which show revenue deficits but pass the test for at least one criteria) and the 'CHERRIES' too could form a coalition. Such a coalition would clearly help the weaker ULB, but could also prove to be advantageous for the stronger ULB. Illustrations 3 and 4 try to demonstrate such possibilities.

Illustration 3

TABLE 5

Name of the District	Name of the ULB	ULB Class (as per 2001 census	ULB type	DR	ADM /TE	PUG/TE	RSURP	NPV
Thane	Ambernath	A	Cherry	76.56	41.12	23.20	68008	*309706*
Amaravati	Amaravati	E	Salvagable	40.83	13.56	36.27	-27897	*-*
vitual entity = (Ambernath + Amravati)				52.34	22.44	32.06	40111	*182664*
NPV has been computed for 50% of the revenue surplus at 7% rate of interest for a period of 15 years. The passing norms for ULBs are (a) DR < 55.07 (b) ADMIN/TE < 33.22 (c) PUG > 28.03								

In this illustration Ambernath is a 'CHERRY' with a revenue surplus but fails the test on all three criteria. Amravati, on the other hand, is a 'salvageable' i.e. it runs a revenue deficit but it passes the test for all three criteria. Clearly Amravati would want to join hands with Ambernath as on its own it would find it inconvenient to access the debt market. Ambernath too would benefit from this coalition as the virtual entity of Amberanth and Amravati shows a revenue surplus and passes the test on all three criteria. In this illustration, this virtual entity of a 'CHERRY' and a 'SALVAGEABLE' would obtain a superior rating than they would have obtained independently. This is a case that illustrates the

double coincidence of wants being satisfied by the act of the two joining together to form a virtual entity.

Illustration 4:

TABLE 6

Name of the District	Name of the ULB	ULB Class (as per 2001 census)	ULB type	Revenue Surplus	NPV
Thane	Navi Mumbai	E	Cherry	422255	***1922931***
Amaravati	Amaravati	E	Salvagable	-27897	
Virtual entity = (Navi Mumbai + Amravati)				394358	***1795889***
NPV has been computed for 50% of the revenue surplus at 7% rate of interest for a period of 15 years.					

In this case both ULBs, Navi Mumbai a 'CHERRY' and Amravati a 'SALVAGEABLE', pass the test for all three criteria so their virtual entity is bound to pass all three criteria. *Prima facie* in this case one is not able to see the motivation for Navi Mumbai to join hands with Amravati. However, there could still be some justification in the formation of such a coalition. For instance, should the requirement of Navi Mumbai be less than that it can raise from the market. Then it could *on-lend* to Amravati at a rate of interest that is greater than the cost of funds to Navi-Mumbai but lower than the rate of the cost of funds that Amaravati faces on its own. This would be an explicit financial arrangement leading to gains all around. The rationale could also be provided by doing the above implicitly, for, such a coalition could be thought of in terms of the project being funded that has economies of scale but do not require spatial contiguity for reaping benefits of services. For instance, should it be so that the project that Navi Mumbai is entering into is such that the 'output' leads to a surplus. It would then be able to offer Amravati the service with little additional cost, but be able to charge a handsome sum for the services provided while remaining within the confines of the aforementioned arguments. This serves the development

argument, as Amravati that would have been left out of the debt market now can access it indirectly.

Illustration 4 is yet another variant of the point – of imputation – that we are trying to make that it is not only advantageous for the best of the ULBs to join hands together but that there is some merit to even the good and not so good ULBs to come together.

The point that we would like to reiterate and emphasize about this exercise is that it only takes us into a realm of possibility within the broad framework of existing institutions. Whether, this will actually materialize will depend on individual as well as policy initiatives and happy accidents!

5. Conclusion

In this paper we have drawn attention to the significance of financial markets' access by sub-national governments. We have focused on the Urban Local Bodies (ULBs) in Maharashtra. Contextualising the financial status of the ULBs, within the parametric environment provided by the current economic scenario in India, we have argued that there is an urgent need to address the issue of resource crunch vis-à-vis functioning of ULBs and their mandate. Whilst there are several well-documented strategies in the literature, in this paper we have focused on conceptually extending the concept of 'pooled fund' which requires the working out of '*intra-group incentives'*. We have also illustrated our argument of 'possibilities' along with the economic and developmental rationale with the help of computations conducted with real data.

Implicit in the above arguments are several threads. One is that the existing *infrastructure fund could be used to facilitate underwriting of the projects that are being undertaken by coalition of ULBs coming together as virtual entities.* This should help the ULBs to float debt and with other enabling changes help initiate the process of ushering in healthy secondary market for this kind of paper. The underlying argument also indicates the required move away by the government from taking on the mantle of direct producer or provider of infrastructure facilities. *The fund should be seen only as seed money to be used*

for purposes of creating an environment where the ULBs are incentivised to take up project through coalition formation and perhaps capacity building consultancy. The other implicit argument here is that the banks should learn (and be allowed) to look at the coalitional formation and encourage them by taking ever-increasing exposure as a matter of policy mandate or indeed as serving their profit motive. These institutions can be useful for creation of policy framework as they do bring to the table considerable amount of relevant experience from consortium formation from lending side. Yet another important implication – an aside – of this paper is the underlying *a need to redefine (by delimiting and refocusing) the role of the state in this regard.* In our scheme of things the state is visualized as a *facilitator.* Legislative changes would need to be explored to provide an enabling environment for the scheme to be operational. Also, the 'DUDS' would need to be identified and their infrastructure needs have to be taken care of directly albeit in an accountable way by the state such that it would help them to graduate from being DUDS to SALVAGEABLES and then to becoming CHERRIES. *Perhaps a pre-Infrastructure Fund could be created for this purpose.*

Thus much more important further work that needs to be done in order to actualize the potential lies in the domain of the design of feasible policy implementation mechanism. Given the situational possibilities, the financial institutions and ULBs will each need to be incentivised to come forward and *create* 'happy accidents'. The government will have to set the stage by promulgating enabling policy initiative using the existing Infrastructure fund along with provision of a pre-Infrastructure fund – may be with the help of the RBI – that will jump-starts the process of economic coalition formation between the ULBs as well as help the DUDS along. The good news is that the present economic ethos is pushing various institutions – like the financial institutions and ULBs – up a steep learning curve. The need to change is no more a question of one's taste or volition but indeed of survival.

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