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Finances of Urban Local Bodies in Jharkhand: Some Issues and Comparisons[1]

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[1] This paper is an based on the project 'Functions and Finances of Urban Local Bodies of Jharkhand' undertaken in National Institute of Public Finance and Policy (NIPFP). The author would like to thank O.P Bohra for his contribution in supervision of data collection and verification and his comments and suggestions on the Project. The author is indebted to Aishna Sharma for her excellent research assistance in the project. The Project has benefitted a lot from the valuable comments and suggestions of M. Govinda Rao, Director, NIPFP. The paper is written when the author is on a visiting appointment to Andrew Young School of Policy Studies in May, 2011.The fellowship for this visit was granted by International Centre for Tax and Development in Institute of Development Studies, University of Sussex which is gratefully acknowledged. Thanks are also due to Andrew Young School of Policy Studies, Georgia State University for their logistic support. However, the usual disclaimer applies.

Abstract

The paper brings together the information on different components of revenues and expenditures of the urban local bodies (ULBs) in Jharkhand and analyses their growth over a recent period. The performances of the ULBs are evaluated by estimating some indicators based on actual revenues and expenditures. The expenditures are also compared with the financial norms estimated for different urban services for Indian cities according to different size classes. An attempt to estimate the gross city product of each ULB in Jharkhand is also made. A broad comparison on finances and service delivery indicators of these ULBs with those in the ULBs of the eight adjacent districts of West Bengal is also attempted.

We find that the revenue capacities estimated on an average can generate additional revenues of 77 per cent for the ULBs in Jharkhand. The increase in total revenues would be the highest (184 per cent) for the 1 lakh plus cities and the lowest (30 per cent) for the smallest size class of cities. We also find that on an average Jharkhand cities generate only 0.17 per cent of their Gross City Products as own revenues. The bigger cities are found to be relatively more constrained than the smaller ones.

An overall analysis of finances on the basis of actuals in the ULBs of the two states reveals that West Bengal is in a comparatively better position than Jharkhand as far as the performance according to indicators related to finances are concerned. Out of eight indicators selected, the performance on an average is better in West Bengal in almost all of them. A close look at the dependency ratio on the higher tiers of the government as a percentage of transfers to total revenues reveal that on an average 91 per cent of the revenues in the ULBs of Jharkhand comes from transfers where transfers constitute grants in different forms of assistance. Whereas in West Bengal the average ratio is 61 per cent which also includes assigned revenues. While only 6 per cent of the expenditures can be covered by own revenues in Jharkhand, the ratio is about 37 per cent in West Bnegal. Own revenues can cover 19 per cent of revenue expenditures in Jharkhand whereas in West Bengal the ratio is 43 per cent. While Jharkhand covers 41 per cent of the revenue expenditure norms by their actual revenue expenditure, West Bengal on an average can only cover 36 per cent.

A brief analysis in terms of some coverage indicators of municipal services, infrastructure, employment, socio-demographic indicators and some standard of living indicators show that the urban service delivery, in terms of some of the coverage indicators, are relatively better in most of the size classes and also on an average as a whole in West Bengal. We can generally conclude that the relatively better indicator in terms of finances and expenditure management in the ULBs of West Bengal has a somewhat positive impact on municipal service delivery too.

Introduction

The paper brings together the information on different components of revenues and expenditures of the urban local bodies (ULBs) in Jharkhand and analyses their growth over a recent period. Jharkhand is a state situated in eastern India. 41 per cent of its income is contributed by the urban sector. With a dominant secondary sector contributing to 39 per cent of the state domestic product, the per capita NSDP stands at Rs 17,887 in 2004-05. This is one of the states with lower than average indicators of development as compared with other Indian states[2]. This is one of the states in India for which the issues in the urban sector are not being explored so far.

The performances of the ULBs are evaluated by estimating some indicators based on actual revenues and expenditures. The expenditures are also compared with the financial norms estimated for different urban services for Indian cities according to different size classes. An attempt to estimate the gross city product of each ULB is also made. A broad comparison on finances and service delivery indicators of these ULBs with those in the ULBs of the eight adjacent districts of West Bengal is also attempted.

We have divided the ULBs into five size classes according to population viz below 25,000, 25,000 to 50,000, 50,000 to 75,000, 75,000 to 100,000 and above 100,000. For a detailed analysis certain indicators affecting fiscal handles of ULBs are identified from the Census of India and are grouped into five categories viz. coverage of municipal services, cost, demand or standard of living, infrastructure and employment. These categories also reveal the status of development in a city, with some possibility of overlap in the categories. Apart from these, it is the resources of the ULBs that are also instrumental in fiscal management in the ULBs.

The analysis on finances is based on the data from the field survey collected through questionnaires from the ULBs in Jharkhand. The data for 2004-05 is analysed in detail as this is the most recent year for which maximum number of ULBs have reported the data. All financial variables are expressed in 2004-05 prices. The estimations of financial requirements are based on the estimated norms for Indian cities by Ramanathan and Dasgupta (2009). The estimations of gross city products (GCPs) of the ULBs in Jharkhand are based on the District Domestic Products estimated by Directorate of Statistics and Evaluation, Jharkhand.

[2] Directorate of Statistics and Evaluation, Jharkhand; Bandyopadhyay and Bohra (2010)

The ULBs in Jharkhand: A Brief Description

In this section an overview of Urban Local bodies of Jharkhand is given and a set of indicators (socio demographic, municipal services and workforce) in the cities according to size classes are analyzed.

The present study is based on 43 ULBs of Jharkhand which are further divided into five size classes mentioned above. A list of ULBs, their population and district specific locations are given below in Table 1.

Table 1 ULBs in Jharkhand: A Snapshot

Population Class	ULB	Status	District	Population
Below 25,000	Jasidih	NA	Deoghar	14,137
	Basukinath	NA	Dumka	14,129
	Chakulia	NA	E Singhbhum	14,325
	Jamtara	NA	Jamtara	22,558
	Kodarma	NA	Kodarma	17,246
	Latehar	NA	Latehar	19,082
	Hussainabad	NA	Palamau	23,441
	Bundu	NA	Ranchi	18,519
	Rajmahal	NA	Sahibganj	17,977
	Seraikela	M	Saraikela	12,270
	Kharsawan	NA	W Singhbhum	6,792
25,000-50,000	Chatra	M	Chatra	42,020
	Madhupur	M	Deoghar	47,326
	Chhatatanr	NA	Dhanbad	32,173
	Chirkunda	NA	Dhanbad	39,131
	Dumka	M	Dumka	44,989
	Mihijam	NA	Dumka	33,236
	Jugsalai	M	E Singhbhum	46,114
	Garhwa	M	Garhwa	36,686
	Godda	M	Godda	37,008
	Gumla	M	Gumla	39,761
	Lohardaga	M	Lohardaga	46,196
	Pakur	M	Pakur	36,029
	Khunti	NA	Ranchi	29,282
	Simdega	NA	Simdega	33,981
50,000-75,000	Katras	NA	Dhanbad	51,233
	Jhumri Tilaiya	M	Kodarma	69,503
	Daltonganj	M	Palamau	71,422
	Chaibasa	M	W Singhbhum	63,648
	Chakradharpur	M	W Singhbhum	55,228
75,000-1,00,000	Chas	M	Bokaro	97,221
	Phusro	NA	Bokaro	83,474
	Deoghar	M	Deoghar	98,388
	Jharia	NA	Dhanbad	81,983
	Sindri	NA	Dhanbad	76,746
	Giridih	M	Giridih	98,989
	Sahibganj	M	Sahibganj	80,154
Above 1,00,000	Dhanbad	M	Dhanbad	199,258
	Jamshedpur	NA	E Singhbhum	612,534
	Mango	NA	E Singhbhum	166,125
	Hazaribag	M	Hazaribag	127,269
	Ranchi	M. Corp.	Ranchi	847,093
	Adityapur	NA	W Singhbhum	119,233

Source: Census of India 2001

Note: M Corp. stands for Municipal Corporation, M stands for Municipality and NA for Notified Area

Indicators from the census data are analysed for each size class of ULBs (Table 2). Municipal Services are the basic services such as Water supply, Roads, Street Lights, Sewerage and Sanitation, and solid waste management, the responsibility of which is given to the local governments in terms of Provision and Operation and Maintenance. Apart from solid waste management the coverage indicators for other services are available in the census.

Other than these coverage indicators, some indicators available from the census are also analysed which has some impact on the fiscal handles of the ULBs. These indicators are grouped according to their roles in determining the expenditures on the ULBs for service provision. However, there are possible overlaps across categories and each group can influence the other.

Cost indicators (Population, population Density, Area, Number of Households and Household Size) determine the expenditure that local governments incur on account of provision of basic services. These indicators determine the cost of service provision by reflecting the extent of economies of scale in the city.

Demand Indicators such as Literacy Rate, Percentage of Households Availing Banking Facilities and Percentage of households having none of the specified assets[3] are indicative of the income levels of the people residing in the jurisdiction of the local bodies, which are among the factors determining the preferences of inhabitants of a city and thus influence demand for Municipal services.

Infrastructure indicators, namely Toilet facilities, Electricity connections (apart from those provided by local government in street lights), Banks per 100 sq km etc. These indicators give an idea about the infrastructure in a city which is provided in collaboration with the state government agencies or private public partnership.

Touching on the Employment indicators the composition of total working population and main working population are analysed. Emphasis is given on the categories like other workers and non agricultural workers which are most relevant as occupations of the urban population. For each size class of cities the median value of a variable is considered for comparisons.

The main observations suggest:

[3] Census of India specifies radio, transistor, telephone, television, bi-cycle, scooter, moto-cycle, moped, car, jeep and van as the set of assets.

- As far as the cost indicators are concerned there is no pattern across size class for Area, Household size and density. Average area for all ULBs taken together is only 13 sq km, household size is as high as 6 and the Density on an average is 3,782 people per sq km.
- In demand indicators Households availing banking facilities and Literacy increase across the first three size classes (below 25,000, 25,000-50,000, 50,000-75,000), fall in the 75,000-1,00,000 size class and rise in the 1 lakh plus cities. Jharkhand ULBs have 67 per cent population as literate on an average and 55 per cent of households availing banking facilities across ULBs (which is above urban India level). Percentage of households having none of the specified assets falls with rise in population, implying larger cities have better access to assets, indicating higher standard of living in bigger cities. On an average 26 percent of ULB households do not have any of the specified assets.
- Street lights per 1000 population and Road length per 1000 population (in km) do not show any pattern across size classes. The average value for street lights per 1000 population for all ULBs is only 6 and in case of Roads per 1000 population it is not even 1 km. The value for percentage of households having Tap as a source of drinking water increases across first three size classes (below 25,000, 25,000-50,000,50,000-75,000) , falls in the size class having population between 75,000 and 1,00,000 and again rises in the size class above 1,00,000. On an average only 21 percent of households have tap water. In case of percentage of households having Closed Surface drainage, bigger cities have higher proportions of households having closed surface drainage. However, on an average only 13 percent of households in Jharkhand cities have closed surface drainage.
- Domestic and Non Domestic electricity connections per 1000 populations, Non Domestic connections to Total connections (percentage) and Bank per 100 sq km do not show any pattern across size classes. The average values for all ULBs taken together are recorded as 83, 19 and 39 percent respectively. Bigger cities record higher values for Toilets per 1000 population, average being 623 for all ULBs. In case of electricity also there is a rising trend across first three classes, the value falls in the 75,000 to 1,00,000 class and rises again in 1 lakh plus cities. For ULBs as a whole it comes out to be 653 connections per 1000 population on an average.
- The employment indicators chosen viz. Main other workers as a percentage of Total Main workers, Main Non Agricultural workers as a percentage of Total Main Workers,

Main other workers as a percentage of working population, Main Non Agricultural workers as a percentage of working population increase with increase in population, the averages recorded for all ULBs stand at 92 percent, 96 percent, 80 percent and 83 percent respectively. Larger cities have more opportunities for employment. However the proportion of main workers in total population is more or less the same across size classes and is highest in the 1 lakh plus category.

The analysis of census data reveals that many variables do not show any pattern across size classes. To move a little further we have also attempted some analysis on the statistical significance of relationships between a set of variables from the data. The summary of the findings is given below.

- We find that Percentage of Households having Closed Surface Drainage, Percentage of Households having water source within premises, Households availing Electricity per 1000 population, Literacy Rate and Households availing Toilet facilities per 1000 population are positively correlated with both Population and Population Density. But it is important to note that all the coefficients with population, though statistically significant, are low except Households having Closed Surface Drainage (0.56).
- In addition to this, Population Density is significantly correlated to Domestic and Non Domestic electricity connections per 1000 population (positive). The correlation coefficient between population density and Households availing Electricity per 1000 population, Domestic and Non Domestic electricity connections per 1000 population and Households availing Toilets facilities per 1000 population are above 0.5.

Table 2 Some Indicators in the ULBs of Jharkhand: Socio-demographic, Demand, Services, Infrastructure and Employment

Categories	Indicators	Below 25,000	25000-50,000	50000-75,000	75000-100,000	Above 100,000	Jharkhand Median
Socio-Demographic / Cost	Population	17,246	38,070	63,648	83,474	182,692	44,989
	Number of Households	2,765	6,257	10,596	15,069	30,863	6,880
	Household Size	6	6	6	6	6	6
	Area(sq km)	13.2	11.0	6.6	14.0	38.1	13
	Density (Persons per sq km)	1,399	3,615	8,330	7,028	6,673	3,782
Demand	Households availing Banking Facilities (per cent)	40.8	51.2	59.4	55.5	62.8	55
	Households having none of the specified assets (per cent)	40.6	29.7	25.7	23.8	19.1	26
	Literacy (per cent)	61.7	66.8	72.0	67.2	71.4	67
Service	Road Length per 1000 Population(in km)	1.5	0.7	0.4	0.5	1.1	0.77
	Street lights per 1000 population (Nos)	6.6	3.7	6.5	14.1	8.5	6
	Households having Closed Drainage (per cent)	6.4	11.2	12.8	18.6	23.5	13
	Households having Tap as source of drinking water (per cent)	6.5	20.2	37.2	31.6	38.9	21
Infrastructure	Domestic and Non Domestic Connections per 1000 Population	65.7	102.7	94.2	79.0	89.5	83
	Non Domestic Connections to Total Connections(per cent)	21.1	17.8	18.9	19.9	17.4	19
	Banks per 100 sq km area (Nos)	31.8	46.5	104.7	85.7	35.1	39
	Electricity Available per 1000 population	480	620	713	710	781	653
	Toilet Facilities Available to population per 1000	440	622	657	713	841	623
Employment	Main Other workers in working population(per cent)	58.1	78.2	79.9	82.8	85.4	80
	Main Non-agricultural workers in Working Population (per cent)	61.5	82.4	82.8	85.7	87.7	83
	Main Other workers as a percentage of main workers	81.1	90.0	94.3	95.3	95.9	92
	Main Non-agricultural Workers to Total Main Workers (per cent)	85.8	95.9	97.8	98.3	98.8	96
	Total Main Workers to Total Population (per cent)	21.7	22.6	23.1	21.1	23.7	22

Source: Census of India, 2001

Finances

On the whole we find that bigger cities do not necessarily perform better in terms of revenue generation. Their own revenues are dominated by non tax collections, though in terms of growth tax collections show a higher value than that of non tax collections. For smaller ULBs dependence on grants is excessive. It is because of these excessive grants that smaller cities record higher averages in terms of total revenues. As far as revenue expenditure is concerned smaller cities record higher per capita values while for capital expenditure the cities in the population size class 75,000-1 lakh also record a high value.

While all the components of revenues, both in absolutes and per capita terms, record positive growth rates for all the size classes, revenue expenditures record a negative growth rate in the 1 lakh plus cities, both in absolute and per capita terms. It is also noted that for both revenues and revenue expenditure the positive trend across size classes exhibited in absolute terms is somewhat reverse to what has been exhibited in per capita terms which indicates that overall growth in revenues and revenue expenditure has been lesser than that of population. Also, though there has been positive growth in revenues and revenue expenditure, overall for all size classes taken together, the growth in revenue expenditure is lower than that in total revenue and also own revenues. This indicates that there is a leakage in resources and the ULBs fail to spend sufficient amounts to cope up with the population pressure.

If we consider the absolutes all the components of own revenue are found to be higher in bigger size classes. Property tax, tax and non tax revenues collected are maximum in the I lakh plus cities, with their non tax collections almost at par with the 75,000-1 lakh population size class average. Own revenue and total revenue are the highest for cities with 75,000- 1lakh population. Total revenues do not show a distinct rising pattern across size classes because of its dependence on grants extent of which differs across size classes in a somewhat inverse manner. The median values of all categories of revenues (Jharkhand Median in Figure 1), for all ULBs taken together is closer to those of the smaller size classes. The details are given in Figure 1.

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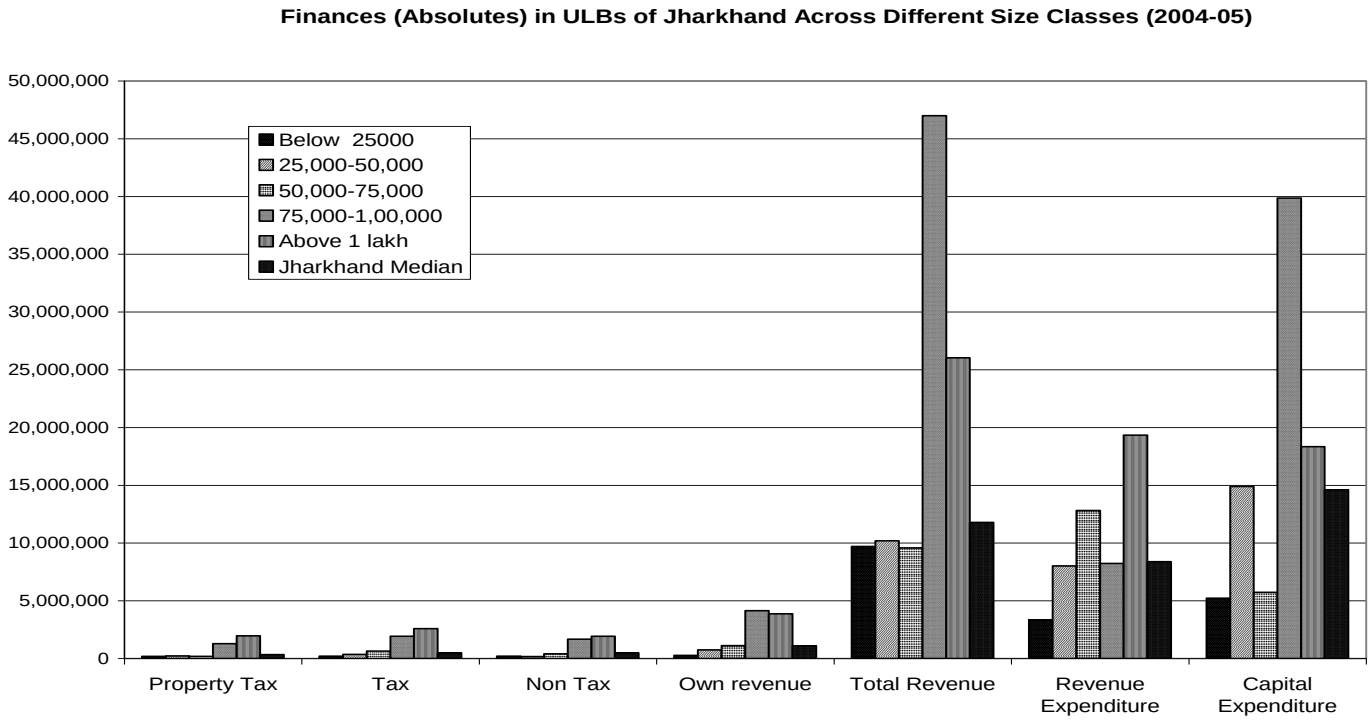
Figure 1



Source: Field Survey, NIPFP, Authors' Computations

We find that in per capita terms property tax remains more or less the same across all size classes with a range of the median values between Rs 6 to Rs13 per capita. The average, for all size classes taken together, stands at Rs 7 per capita which is abysmally low by all standards. Non Tax revenues also do not show much variation across size classes with a range of Rs 7 per capita to Rs 19 per capita, the overall average being Rs 11 per capita

Own Revenue remains almost same in the first three classes and is higher by Rs 12 per capita in 75000-100000 population class and by Rs 5 per capita in last class. The maximum own revenue is Rs 40 per capita in the 1 lakh plus cities and minimum is Rs 21 per capita for 50,000-75,000 population size class. The average taking all the size classes in Jharkhand is Rs 21 per capita.

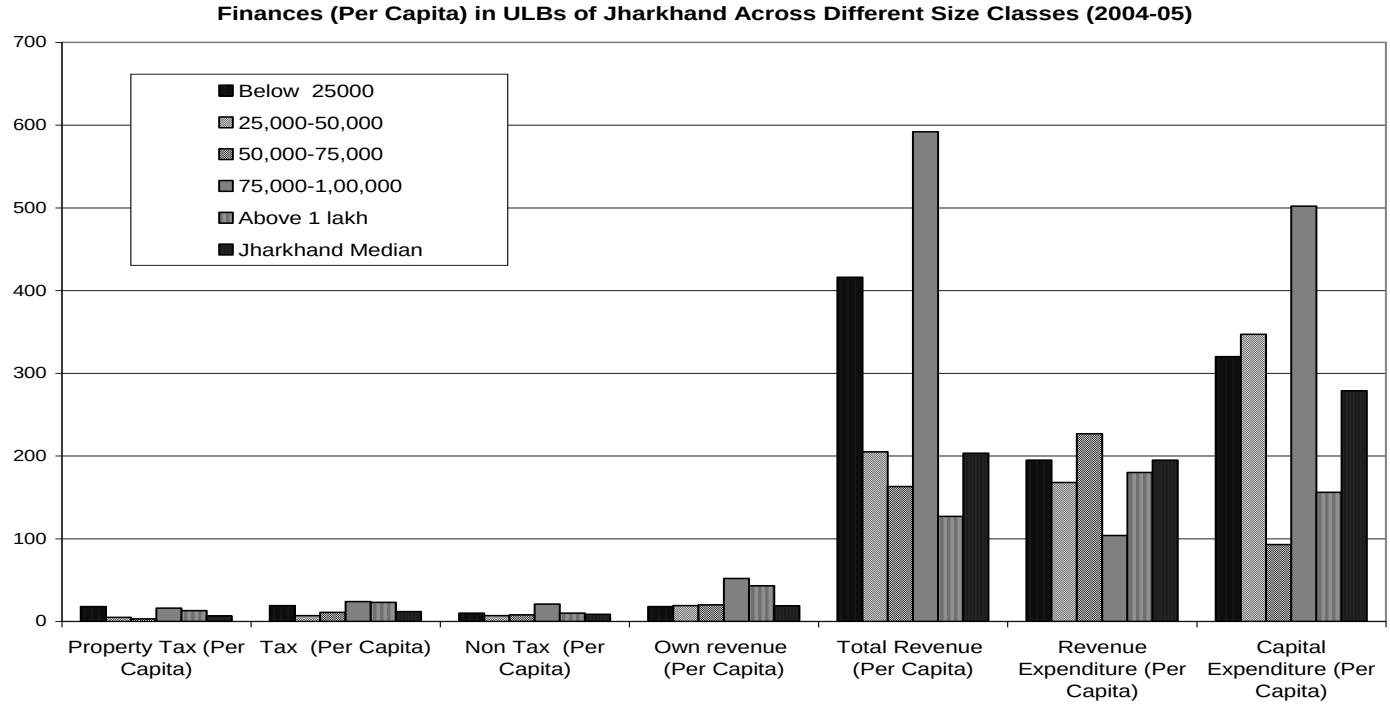
Transfers also do not show a definite pattern across size classes. Maximum is recorded in size class having population less than 25,000 at Rs 730 per capita and minimum being Rs 137 per capita in 50,000 to 75,000 population class. The average for all ULBs stands at Rs 170 per capita with a high degree of variation across ULBs.

Total revenue shows a falling trend across the first three size classes rises in 75,000 to 100,000 population class and falls again when population exceeds 100,000. Maximum is recorded for the below 25,000 size class at Rs 758 per capita (owing to transfers at Rs 730 per capita, which is 96per cent of total revenue)and minimum at Rs 182 per capita in the I lakh plus cities. Average for all the cities is recorded to be Rs 176 per capita. Details of the per capita values are given in Figure 2.

Revenue expenditure (absolute) is the highest in 1 lakh plus cities while capital expenditure (absolutes) is the highest in 75,000-1 lakh population size class. In absolute terms revenue expenditures show a rising trend across the first three size classes, falls in the 75,000 to 1 lakh size class and then again rise in the 1 lakh plus size class. Capital expenditure in absolute terms however does not show any pattern across size classes.

In per capita terms smaller size classes record higher revenue expenditure, a trend observed is just the opposite of what has been observed for absolute levels. For capital expenditure 75,000-1 lakh population size class records the highest median value and no pattern can be defined across size classes (Figures 1 and 2).

Figure 2



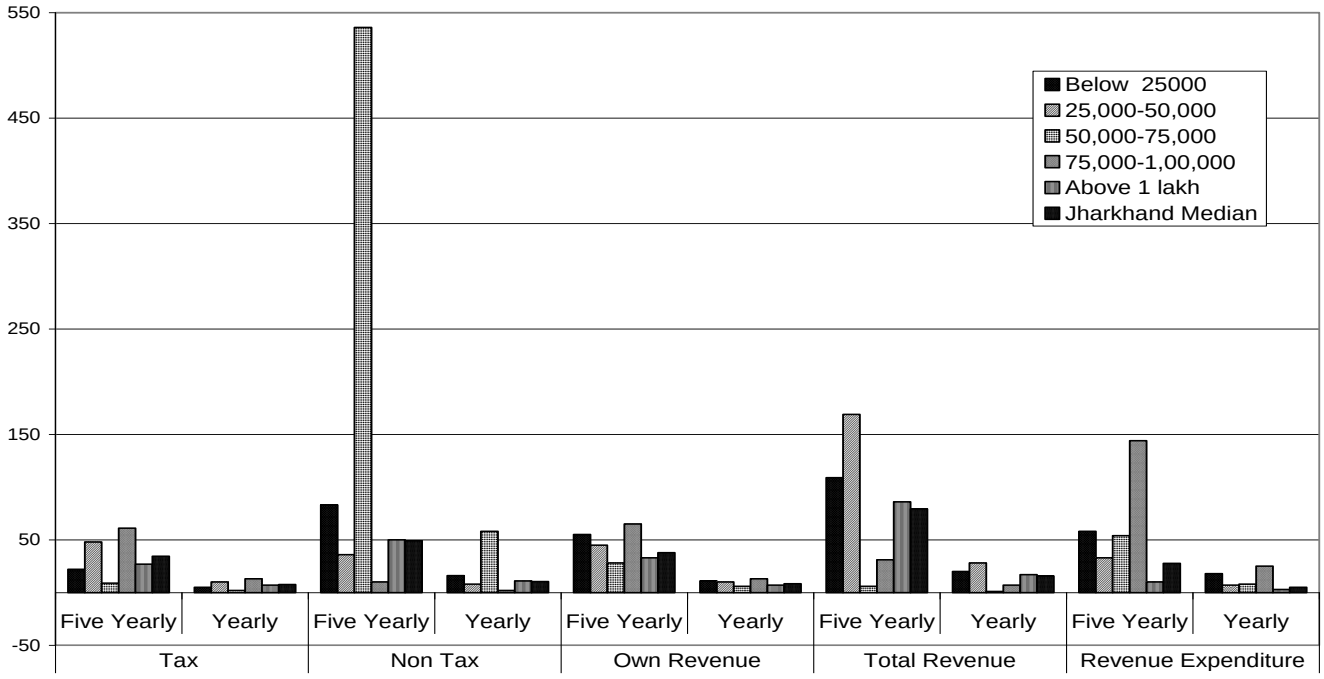
Source: Field Survey, NIPFP, Authors' Computations

Growth of revenues and expenditures are also studied from the data collected on finances of the ULBs. We have considered the data on the latest five years (from 2002-03 to 2006-07) for each ULB and calculated five yearly and annual average growth rates for each of the financial variables. A close look at the growth rates of the revenues and expenditures (Figures 3 and 4) show that for both absolute and per capita levels five yearly growth rates show more fluctuations than the yearly growth rates. We analyse in detail the yearly growth rates. The behavior of growth rates in absolute and per capita terms are the same across size classes. The main observations suggest:

- No clear patterns are visible across size classes for all categories of own revenue.
- While the growth of tax collections are the highest in the 75,000-1,00,000 population category, non tax collection is the highest in the size class of 50,000-75,000 size class. However own revenue growth is the highest in the 75,000-1,00,000 population size class.

Figure 3

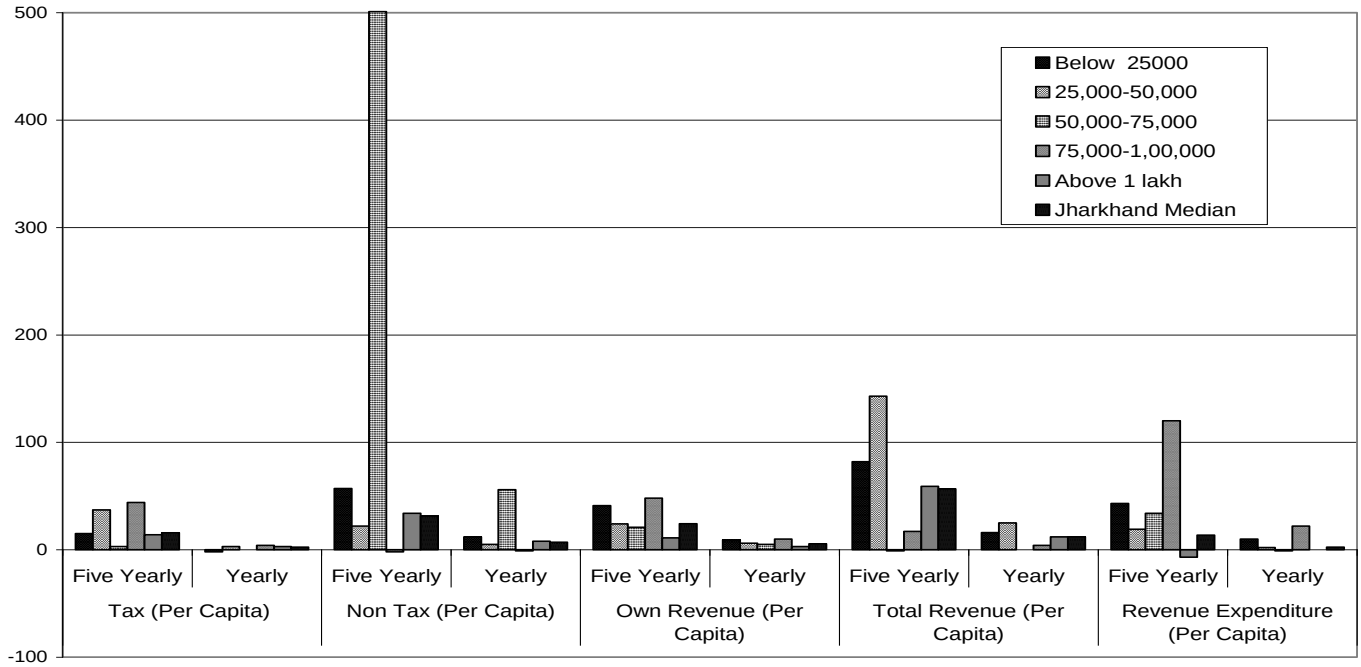
Growth of Financesin (Absolutes) in ULBs of Jharkhand



Source: Field Survey, NIPFP, Authors' Computations

Figure 4

Growth of Finances (Per Capita) in ULBs of Jharkhand



Source: Field Survey, NIPFP, Authors' Computations

- For total revenues smallest two size classes record higher growth rates than the larger cities which is dominated by the growth of grants.
- Growth of revenue expenditure is the highest in the population class of 75,000-1 lakh and lowest in the population class of above 1 lakh, both in absolute and per capita terms. For 1 lakh plus cities the five yearly growth of Revenue expenditure registers a negative growth rate of 7 per cent and annual growth is zero, in per capita terms. In absolute terms five yearly growth is 10 per cent and annual growth is as low as 3per cent.

Some performance indicators are also analysed. (Table 3). All these indicators are in per capita or percentage terms or expressed as indices. Some way or the other they give an idea about the extent of self reliance for the ULBs in Jharkhand.

A look at the transfers to total revenue ratios reveals that all the size classes of cities are heavily dependent on the transfers. It is to be noted that these transfers consists of grants in the form of assistance from higher tiers of the government as in Jharkhand very few ULBs get the

shared revenues from the state[4]. So this dependence is totally to sources outside the control of the ULBs. On an average 91 per cent of the revenues in the ULBs of Jharkhand comes from transfers. The size class of below 25,000 population records the highest dependency ratio of 97 per cent whereas the size class of 75,000-1 lakh population is found to be the most self reliant with 67 per cent (on an average) of their revenues coming from transfers.

Table 3 Performance of the ULBs in Jharkhand: Some Indicators (2004-05 Prices)

Indicators	Below 25,000	25,000-50,000	50,000-75,000	75,000-1,00,000	Above 1,00,000	Jharkhand
Transfers to Total Revenue (per cent) Median (minimum, maximum)	97 (66,100)	91 (78,99)	84 (78,95)	67 (62,86)	89 (68,99)	91 (62,100)
Revenue- Expenditure Gap (Rs, Per capita) Median (minimum, maximum)	54 (-1052,837)	-263 (-1472,165)	-24 (-121,536)	-314 (-817,-34)	-22 (-2095,85)	-74 (-2095,837)
Revenue to Expenditure Ratio (per cent) Median (minimum,maximum)	130 (27,1758)	29 (1,196)	66 (47,188)	39 (18,80)	78 (7,151)	71 (1.2,1758)
Own Revenue- Expenditure Gap (Rs, Per capita) Median (minimum, maximum)	-321 (-1931,-28)	-576 (-1843,9)	-204 (-544,29)	-430 (-989,-155)	-103 (-2203,-23)	-354 (-2203,29)
Own Revenue to Expenditure Ratio (per cent) Median (minimum, maximum)	6.3 (0.7,28)	2.7 (0.5,18)	10.2 (7.7,15)	9.0 (4.6,19)	8.3 (0.7,16.2)	5.9 (0.5,27.5)
Own Revenue-Revenue Expenditure Gap (Rs, Per Capita) Median (minimum,maximum)	-166 (-804,42)	-236 (-464,9)	-67 (-151,29)	-85 (-211,1)	-7 (-464,1)	-122 (-804,42)
Own Revenue to Revenue Expenditure (per cent) Median (minimum,maximum)	15 (1,159)	6 (2,70)	27 (10,60)	31 (20,103)	36 (10,71)	19 (1,159)
Revenue Expenditure to Revenue Expenditure Norms (per cent) Median (Minimum, Maximum)	35 (2,148)	47 (8,86)	36 (19,52)	42 (22,54)	25 (1,103)	41 (1,148)
Capital Expenditure to Capital Expenditure Norms (per cent) Median (Minimum, Maximum)	3 (0.2,15)	3 (1,12)	3 (1,10)	5 (1,7)	2 (0.1,19)	3 (0.2,19)

Source: Field Survey, NIPFP, Authors' Computations

The difference in revenues and expenditures is found to be positive indicating a surplus only in the smallest size class of cities. Rest of all the size classes record a deficit ranging between Rs 314 per capita for the 75,000 to 1 lakh population size class to Rs 22 per capita for the 1 lakh plus cities. When converted to percentages it is found that the smallest size class has on an average a surplus of 30 per cent of their revenues over expenditure. The revenue generated

[4] Out of 39 ULBs only one ULB viz. Simdega has reported shared revenues for 2004-05 which turns out to be 7 per cent of total transfers.

in other size classes range between 29 per cent in the size class of 25,000-50,000 population and 78 per cent in I lakh plus cities, the average for Jharkhand as a whole being 71 per cent[5].

The gaps between own revenues and expenditures are also recorded and it is found that there is a deficit in all the size classes on an average ranging between Rs 103 per capita in 1 lakh plus cities and Rs 576 per capita in the size class of 25,000- 50,000 population, the average for Jharkhand being Rs 354 per capita. When converted to percentages it is found that the averages for size classes of 50,000-75,000 and 75,000-1 lakh are at par at 10 per cent and 9 per cent respectively while the lowest (2.7 per cent) is recorded for 25,000-50,000 population size class with the average for Jharkhand being recorded at 5.9 per cent.

The gaps between own revenues and revenue expenditure are also studied. It is found that there is a deficit in all the size classes, the lowest deficit of Rs 7 per capita is recorded for the 1 lakh plus cities whereas the highest deficit is recorded at Rs 236 per capita for the cities in 25,000-50,000 population size class, the average deficit for Jharkhand being recorded at Rs 122 per capita. When converted to percentage terms it is found that the own revenues on an average can finance at least 6 per cent of revenue expenditures in the cities 25,000-50,000 population size class and at most 36 per cent in 1 lakh plus cities, with Jharkhand average for this ratio being recorded as 19 per cent.

We have used the latest norms estimated by Ramanathan and Dasgupta[6] for urban India according to size classes of cities (Table A3, Appendix) to derive the requirements for Jharkhand service wise the results of which are summarized in Table A2. We have also compared the revenue and capital expenditures with the O&M and capital financial requirements which are useful as an indicator of performance of ULBs for practical purposes. The results are summarized in the last two rows in Table 3.

We find that the revenue expenditures are on an average 41 per cent of these financial norms. No unique pattern has been found in these ratios across city size classes. So we cannot say that the bigger cities are worse off in terms of covering higher percentage of the financial norms by their revenue expenditures. Only the cities having population between 25,000 and

[5] A comparison between revenue and revenue expenditure shows that in size classes having population less than 25,000, between 25,000 and 50,000 and 75,000 and 1,00,000 total revenue exceeds revenue expenditure. Opposite holds in the remaining size classes. If in place of total revenue own revenue is considered they are much lower than revenue expenditure in all population classes.

[6] Estimates of Urban Infrastructure Financing in India 2006-2031 (Draft), R. Ramanathan and S. Dasgurta, August 2009.

50,000, on an average, cover the highest proportion of their financial requirements which is 47 per cent. It is clear that all the size classes spend much lower levels than what is required according to norms.[7]

We have also calculated the percentage of capital expenditure norms according to size classes (Table 3, last row) from investment requirements (Table A2 and A3) covered by actual capital expenditures. We find that on an average the ULBs can cover only 3 per cent of their investment requirements, the maximum being recorded for the size class of 75,000 to 1 lakh and the minimum for size class of 1 lakh plus size class.

A Comparative Analysis

This section attempts a comparison of finances with 48 ULBs situated in the eight districts of West Bengal viz. Purulia, Bankura, Bardhaman, East Medinipur, West Medinipur, Murshidabad, Maldah, Murshidabad, which are adjacent to the state of Jharkhand (Figure 5). It would be particularly interesting to base the comparison with a set of ULBs which are situated in a region which shares similar topography. We have analysed the data on finances for 48 ULBs in these eight districts of West Bengal and attempt a comparison according to size classes and as a whole with the ULBs of Jharkhand[8].

Table 4 Finances (Rs, Per Capita) for the Year 2004-05

City	Property Tax	Tax	Non Tax	Own Revenue	Transfers	Total revenue	Revenue Expenditure
Jharkhand (Median) (Min,Max)	7 (0.56, 39)	9 (0.69, 98)	11 (0.07, 33.82)	21 (0.76, 113)	171 (7, 2719)	176 (7, 2737)	182 (6,814)
West Bengal (Median) (Min,Max)	37 (1.9, 455)	52 (6, 491)	49 (1, 237)	126 (11, 598)	190 (85, 412)	324 (120, 705)	251 (52, 644)

Source: Central Statistical Organisation, ; Administrative Report of Municipal Affairs Departments 2001-2005, Government of West Bengal, Budgets of Jharkhand 2002-2006

[7] It is to be mentioned that these financial requirements are the o&m for the basic infrastructure services provided by the municipality. In Jharkhand, the ULBs provide solid waste management, street lights and part of roads infrastructure. So the comparison is based on the norms for these services only. Apart from these, the ULBs spend on other accounts like general administration, wages and salaries, and various other services which are considered as a part of revenue expenditure but in the absence on available financial norms for these services cannot be taken in the financial norms estimation. So the expenditure norms are underestimation of the total expenditure norms of the ULBs as a result of which the percentages of these norms reported to be covered by the ULBs are somewhat overestimated.

[8] Data on capital expenditure is not available for the ULBs in West Bengal.

Figure 5: District Map of West Bengal

Finances: Comparisons with ULBs in West Bengal

We start with a brief overview of the different components of revenues and expenditures of the ULBs in the selected districts in West Bengal. The ULBs are divided into five size classes as mentioned earlier. The main observations suggest (Figures 6 and 7):

- Property Tax collection varies between Rs 25 per capita-Rs 96 per capita. Median value for all the ULBs taken together is Rs 37 per capita which is more than five times as high as that of Jharkhand ULBs.
- Non Tax revenue collections do not show any definite pattern across size classes. The median values range between Rs 48 and Rs 78 per capita Median value for all the ULBs taken together is Rs 47 per capita which is more than four times as high as that of Jharkhand ULBs.
- Own Revenue ranges between Rs 98 to Rs 177 per capita. Median value for all the ULBs taken together is Rs 126 per capita which is six times as high as that of Jharkhand ULBs.
- Transfers do not show much difference across size classes except the one having population between 75,000 and 100,000 which records a minimum value at Rs 130 per capita. Maximum is Rs 222 per capita (below 25,000 size class). Median value for all the ULBs taken together is Rs 190 per capita which is 11 per cent higher than that of Jharkhand ULBs.
- Total Revenues do not show much variation across size classes. The median values across size classes ranges between Rs 228 per capita (size class 75,000 to 100,000) and Rs 374 per capita in the 1 lakh plus cities. Median across all size classes is recorded at Rs 324 per capita which is almost twice as high as that of the Jharkhand ULBs.

The growth rates of various components of Finances of West Bengal's selected ULBs are computed over a five year period, from 2002-03 to 2006-07, using two measures of average annual growth rates derived on the basis of the growth rate over the five years. The growth rates over the recent five years show greater fluctuations, so the analysis is done using the average annual growth rates. Figures 6 & 7 give the details according to size classes annual average growth rates of the local finances of Jharkhand and West Bengal.

The main observations suggest:

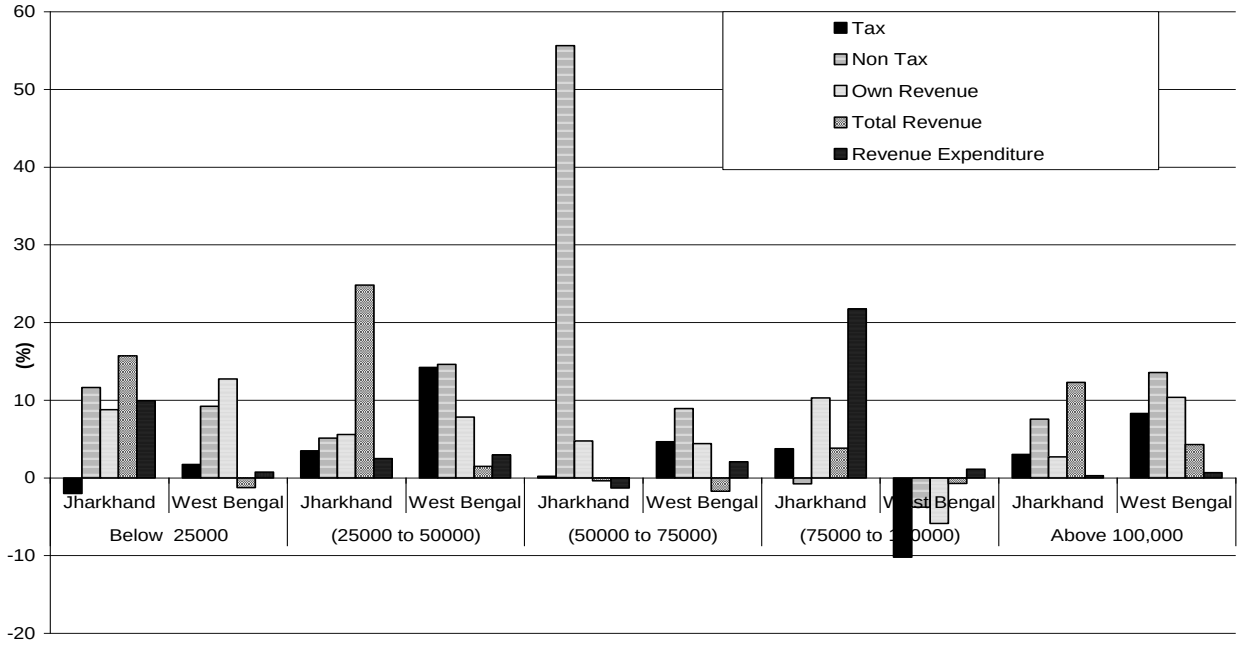
- Both for absolutes and per capita levels, there is no pattern across size classes of cities for any of the components of revenues or expenditures. Tax, non tax and transfers grow on an average at the same rate both in absolute and per capita terms, the rates being 5, 12, and 1 per cent respectively. Own revenues on an average grow at a rate of 14 per cent in

absolute terms and 7 per cent in per capita terms while total revenues growth in absolute terms is recorded at 3 per cent and that in per capita terms is recorded at 1 per cent.

- Tax , Non tax, Own Revenue and Total Revenue (all in per capita terms) have registered positive growth rates across size classes except the size class having population between 75,000 and 1,00,000 in which the growth rates are negative for all the components. In absolutes the growth rate of total revenue is positive in this size class while all the other components record negative growth rates.

Figure 6

Annual Growth Rates of Local Finances (Per Capita): Jharkhand and West Bengal(selected districts)



Source: Authors' Computations

- However in case of Own Revenue Growth rates there is a declining trend across size classes, barring the size class having population above 1,00,000 indicating that higher the population size class, lower the growth rates in revenues. The extent of decline is striking in the size class of 75,000 to 1 lakh population for which the growth rate turns out to be negative.
- If looked at Revenue expenditure growth rates, it increases from size class having population below 25000 to size class having population between 25000 and 50000 and falls thereafter. The larger cities enjoy economies of scale in terms of per capita revenue

expenditure incurred. However this can also be a cause of concern as the ULBs might not be expending on operation and maintenance of services at par with the norms so suggested. On an average the ULBs are spending 36 per cent of the expenditure specified by norms (Table 5).

- Leaving aside size class with population between 75,000 and 100,000, it can be seen that the per capita own revenue in particular have grown more than the per capita revenue expenditure across size classes, whereby one can reach the conclusion that ULBs of selected districts of West Bengal are more or less self reliant.
- Another point to be noted is that per capita total revenue growth is less than the growth in per capita own revenue across all size classes, which is precisely due to negative or at the most 1 per cent growth rate (in size class having population between 25000 and 50000 and above 100000) of grants. This again confirms the low dependency of ULBs of West Bengal on upper tiers of government

A comparison of the per capita values for different categories of revenues across size classes between the ULBs of Jharkhand and selected districts of West Bengal is also attempted. All comparisons are in terms of the median value of each variable for a size class. Table 4 gives the summary for the median of all ULBs in the two states in the last two rows. Figure 7 and Figure 8 give the details for each size class of cities for the two states.

It is to be noted that

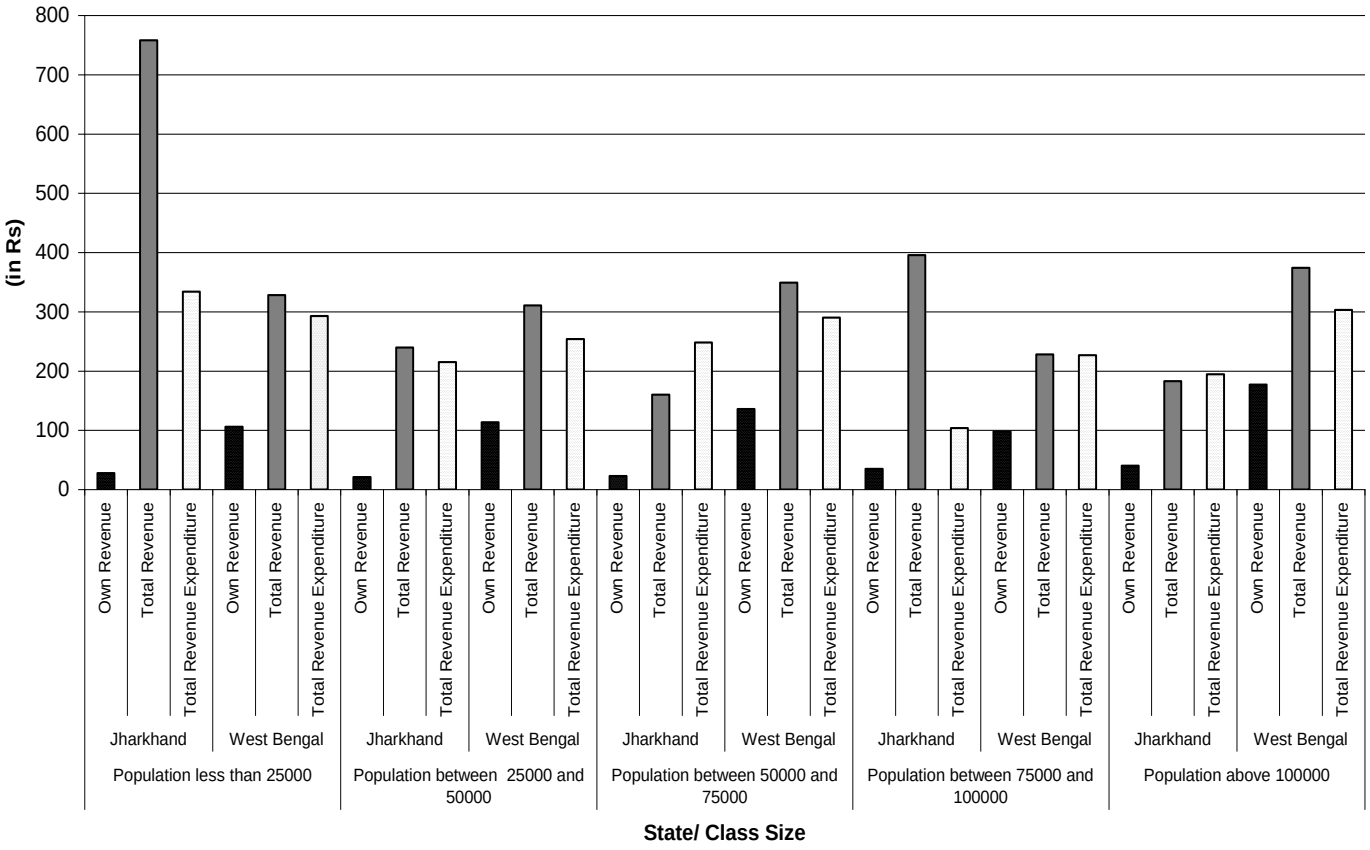
- The average values for each component of revenues and also revenue expenditure, both in absolute and per capita terms are higher in West Bengal than in Jharkhand. Apart from Transfers and Total revenue all the other financial variables in West Bengal in absolute terms are at least one and a half times higher than those in Jharkhand.
- Property Tax, which is a major constituent of Revenues for Urban Local Bodies, is not only abysmally low (Rs 7 per capita on an average) in all the towns in Jharkhand, it also is lesser than the Property Tax earned by West Bengal ULBs across all size classes. Population size class greater than 1 lakh, the difference is maximum.
- Non Tax revenues (which includes mobile tower installation charges, rent from municipal land, fees from building, sale proceeds of land, proceeds from licenses etc) too are higher in West Bengal. However in last two size classes the difference reduces.

- Transfers in the ULBs of Jharkhand exceed those in West Bengal for size classes less than 25,000, between 25,000 and 50,000 and between 75,000 and 100,000. In size class having population less than 25000 there is a huge difference between the transfers of two states.
- In the ULBs having population less than 25000 and between 75000 and 100000, the Total Revenue of Jharkhand ULBs exceeds the Total Revenue of West Bengal ULBs because transfers, which is a major component of total revenue here, in Jharkhand (because of huge share of transfers in Jharkhand in these size classes, though the own revenue is low)
- Even though transfers of West Bengal is less than transfers of Jharkhand in ULBs having population between 25000 and 50000, the Total Revenue of West Bengal is higher than Total Revenue of Jharkhand because own revenue component (owing to property tax and non tax) is greater in case of West Bengal than Jharkhand in this size class.
- Even in the size classes of ULBs of Jharkhand which record a higher Total Revenue than those of West Bengal, the own revenue is very minimal. Owing to the exiguous amount of property tax and Non Tax, the share of Own Revenue in Total Revenue is very less in Jharkhand ULBs (across all size classes) contributing to only 10 per cent on an average. This share being 40 per cent is somewhat better in West Bengal ULBs.
- As already mentioned the Revenue Expenditure across all size classes is greater in ULBs of West Bengal than in those of Jharkhand. But it is interesting to note that the reverse is the case with Capital Expenditure. The selected ULBs of West Bengal the expenditure is on account of operation and maintenance. Whereas Jharkhand being a newly formed state has to incur a major chunk of the expenditure on provision of minimum basic services, which is precisely the reason for such high capital expenditure in Jharkhand ULBs vis a vis West Bengal ULBs.
- Revenue Expenditure constitutes only 26 per cent of the Total Expenditure in Jharkhand ULBs whereas 66 per cent in case of ULBs in West Bengal.
- When Own Revenue of Jharkhand ULBs is compared with Revenue Expenditure it is found to finance on an average only 17 per cent of Revenue Expenditures. West Bengal ULBs have an edge in that they can finance 43 per cent of Revenue expenditure from Own Revenue generated. Also the ULBs of West Bengal depict economies of scale in

financing revenue expenditure. Bigger ULBs are in a better position to support their revenue expenditures

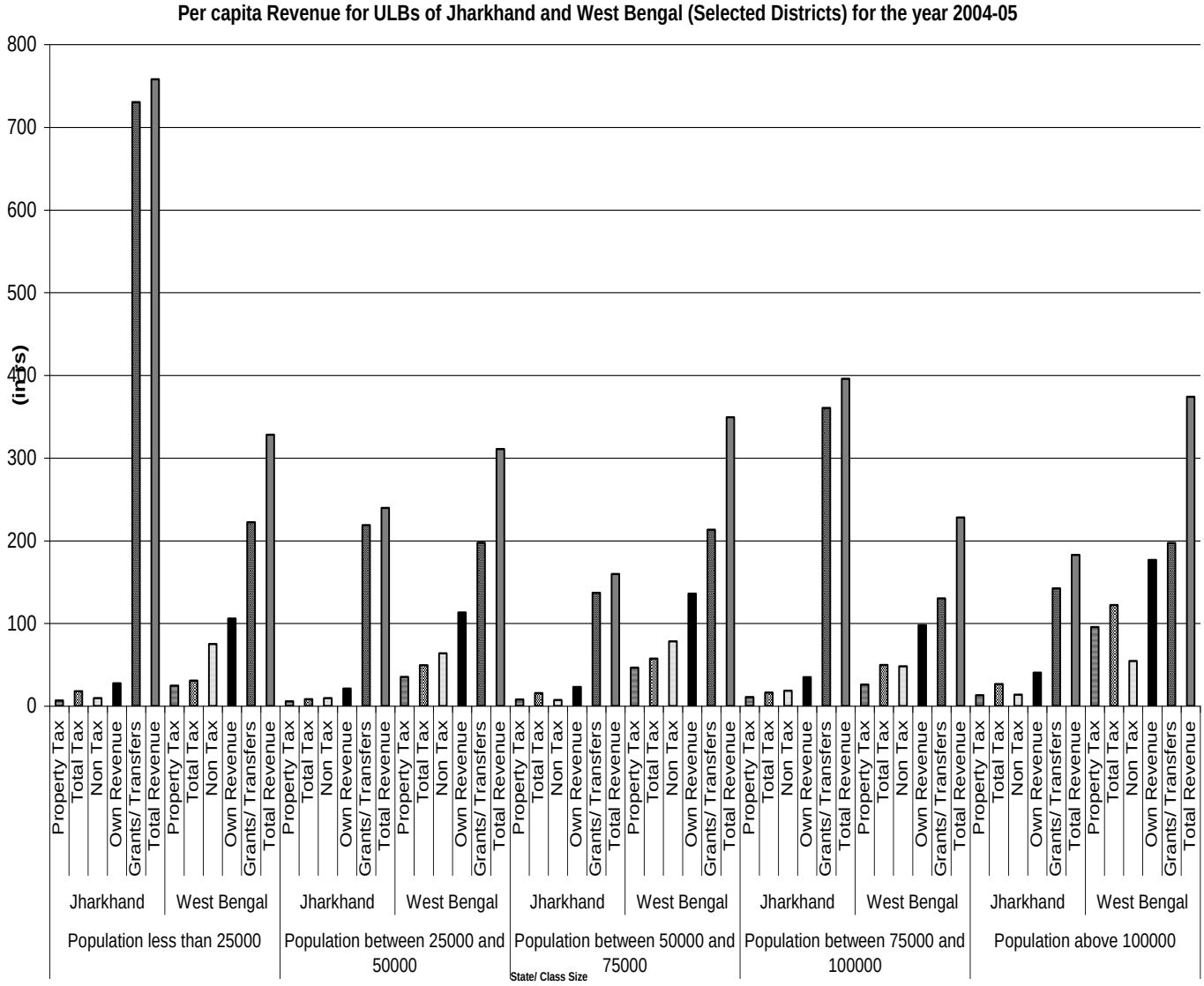
Figure 7

Per Capita Revenue and Per Capita Expenditure for ULBs of Jharkhand and West Bengal (selected districts) for the Year 2004-05



Source: Authors' Computations

Figure 8



Source: Authors' Computations

A comparison of some of the indicators on performance of the ULBs in Jharkhand and West Bengal is also attempted. Table 5 summarises the indicators for the ULBs in West Bengal according to size classes and each indicator would be compared across the two states.. Comparing Table 3, Table 4 and Table 5 we find that:

- The gap between own revenue and revenue expenditure in per capita terms is the only performance indicator for which the median value for all ULBs in West Bengal record a higher average deficit than that of Jharkhand. All other indicators on the average are better in West Bengal than in Jharkhand.
- For the smallest size class of cities, a few of the indicators report a better performance in Jharkhand than those in West Bengal. They are revenue expenditure gap (showing a higher surplus per capita in Jharkhand), revenue as a proportion of expenditures (again a higher surplus that West Bengal in percentage terms). The proportion of revenue expenditure to revenue expenditure norms, in this size class records a lower deficit in West Bengal.
- For the 25,000 to 50,000 size class of cities, all the performance indicators are much better in West Bengal than in Jharkhand excepting for the ratio of revenue expenditure to revenue expenditure norm which is higher in Jharkhand.

Table 5 Performance of the ULBs in West Bengal: Some Indicators

Indicators	Below 25,000	25,000-50,000	50,000-75,000	75,000-1,00,000	Above 1,00,000	West Bengal
Transfers to Total Revenue (per cent) Median (Minimum,Maximum)	68 (52,86)	67 (39,78)	64 (38,77)	54 (46,91)	58 (15,88)	61 (15,91)
Revenue- Expenditure Gap (Rs, Per capita) Median (Minimum, Maximum)	2 (-117,96)	11 (-64,121)	-23 (-55,177)	-39 (-78,25)	8 (-46,3953)	-1 (-117,3953)
Revenue to Expenditure Ratio (per cent) Median (Minimum,Maximum)	101 (75,141)	104 (82,175)	94 (89,168)	86 (71,115)	102 (89,1061)	100 (71,1061)
Own Revenue- Expenditure Gap (Rs, Per capita) Median (Minimum,Maximum)	-176 (-451,-94)	-180 (-299,10)	-204 (-358,10)	-161 (-269,-61)	-160 (-448,272)	-169 (-451,272)
Own Revenue to Expenditure Ratio (per cent) Median (Minimum,Maximum)	34 (12,60)	35 (18,106)	35 (21,104)	40 (7,62)	46 (14,358)	37 (7,358)
Own Revenue-Revenue Expenditure Gap (Rs, Per Capita) Median (Minimum,Maximum)	-141 (-384,-64)	-143 (-240,31)	-167 (-284,44)	-131 (-214,-40)	-119 (-351,1116)	-139 (-384,1116)
Own Revenue to Revenue Expenditure (per cent) Median (Minimum, Maximum)	39 (14,69)	40 (21,122)	40 (31,119)	56 (8,72)	51 (16,211)	43 (8,211)
Revenue Expenditure to Revenue Expenditure Norms (per cent) Median (Minimum, Maximum)	39 (28,64)	34 (17,66)	34 (24,71)	29 (20,53)	44 (8,73))	36 (8,73)

Source: Authors' Computations

- For 50,000 to 75,000 size class, revenue expenditure gap in per capita terms and own revenue expenditure gap in per capita terms are on an average the same. The average per capita gap between own revenue and revenue expenditure records a higher deficit in West Bengal than that in Jharkhand. This is also true for the ratio of revenue expenditure to revenue expenditure norms.
- For the 75,000 to 1 lakh population size class the average per capita deficit of own revenues over revenue expenditure is higher in West Bengal than that in Jharkhand.
- In 1 lakh plus cities the average per capita gap between own revenue and expenditure and also own revenue and revenue expenditure show higher deficits in West Bengal but in percentage terms own revenues cover a higher percentage of total expenditure as well as revenue expenditure. As far as the ratio of revenue expenditure to revenue expenditure norms is concerned this is the only size class for which West Bengal records a higher average than Jharkhand.

An overall analysis of finances in the ULBs of the two states reveals that West Bengal is in a better position than Jharkhand as far as the performance according to indicators related to finances are concerned. A brief analysis in terms of some coverage indicators of municipal services, infrastructure, employment, socio-demographic indicators and some standard of living indicators (Table 6) can throw some light on the outcomes of the generation of revenues and expenditures.

The main findings suggest:

- Among the municipal service delivery indicators, road length per 1,000 population, street lights per 1,000 Population on an average, in all size classes of West Bengal is higher than those of Jharkhand. Households having tap as a source of Water is higher in West Bengal than in Jharkhand across all size classes except the ones having population between 50,000 and 75,000 and between 75,000 and 1,00,000.
- In case of Households having Closed Surface Drainage Jharkhand is relatively better placed than West Bengal across all size classes
- However, within the main workers category, the share of other workers (comprising of all government servants, municipal employees, teachers, factory workers, plantation workers, those engaged in trade, commerce, business, transport banking, mining, construction, political or social work, priests, entertainment artists, etc.) and Non primary

workers is higher in Jharkhand than in West Bengal ULBs across all size classes. In the main workers West Bengal has more of Agricultural Labour and Cultivators than other workers and household industry workers.

- In terms of Literacy and Households having None of the specified Assets ULBs of Jharkhand stand more or less at par with the ULBs of West Bengal if we consider the average values.

From the above analysis it is clear that the service delivery, in terms of some of the coverage indicators, are relatively better in most of the size classes of ULBs and also on an average as a whole in West Bengal than those in Jharkhand. The same holds true for the financial variables in the ULBs too. We can generally conclude that the relatively better indicator in terms of finances and expenditure management in the ULBs of West Bengal has a somewhat positive impact on municipal service delivery.

Table 6 Some Indicators in the ULBs in Selected Districts of West Bengal: Socio-demographic, Demand, Services, Infrastructure and Employment

Categories	Indicators	Below 25,000	25000-50,000	50000-75,000	75000-100,000	Above 100,000	West Bengal Median
Socio-Demographic / Cost	Population	17,872	34,480	61,877	77,513	161,456	53,145
	Number of Households	3,339	7,055	12,322	12,414	33,866	11,454
	Household Size	5	5	5	6	6	5
	Area(sq km)	10.36	12.305	9.635	14.25	23.44	13
	Density (Persons per sq km)	1,676	2,660	6,939	5,440	5,238	4,049
Demand	Literacy (per cent)	65	67	72	81	73	70
	Households availing banking facilities (per cent)	35.0	35.0	36.0	39.0	58.0	39
	Households having none of the specified assets (per cent)	22.0	29.0	30.0	27.0	22.0	33
Service	Road Length per 1000 Population(in km)	1.9	1.3	1.2	2.5	1.0	1.19
	Street Lights per 1000 Population	23	32	19	27	24	25
	Toilets available per 1000 Population	615	646	747	669	692	669
	Households having Closed Surface Drainage (per cent)	2.2	5.9	6.6	6.5	12.0	7
	Households having Tap as a source of water (per cent)	42.9	30.2	33.5	10.8	70.4	36
Infrastructure	Domestic and Non Domestic Connections per 1000 Population	116.8	121.0	134.3	109.2	105.7	116
	Non Domestic connections to Total Connections (per cent)	25.5	26.6	20.8	21.4	20.0	22
	Electricity available per 1000 Population	427	558	671	623	761	647
	Banks per 100 sq km	19.3	38.5	54.4	56.1	46.9	43
Employment	Main Other workers as a percentage of Total working Population (per cent)	57.9	70.9	78.6	87.0	88.7	79
	Main non primary workers to working Population (per cent)	61.6	78.1	86.3	88.9	90.1	85
	Main Other workers to Total Main Workers (per cent)	67.9	83.6	84.7	96.3	96.2	91
	Main Non Primary Workers to Total Main Workers (per cent)	74.2	93.4	97.5	98.3	98.9	96
	Total Main Workers to Total Population (per cent)	27.9	30.5	30.6	27.2	27.0	30

Source: Census of India, 2001

Gross City Products and Revenue Capacities: Some Preliminary Estimations

In this section we attempt some estimations based on the actual revenues and expenditure levels of the ULBs of Jharkhand. These estimations give an overview of the underutilization of capacities in revenue generation in the ULBs of Jharkhand. We finally estimate the revenue capacities defined as the maximum potential revenue that can be generated from the ULBs in Jharkhand. Table 7 gives the details of the estimation results according to city size classes. We also estimate the financial requirements of the ULBs in various size classes according to services provision matrices.

The first set of estimations deal with the financial requirements according to size classes of cities in Jharkhand. Table A1 (Appendix) shows the detailed estimated financial requirements in the ULBs of Jharkhand in absolute terms on the basis of norms derived by Ramanathan and Dasgupta (Tables A2 and A3) in different scenarios on service delivery responsibilities. Also, we have compared the requirements in two years 2004-05 1nd 2009-10 to have an idea about how it has grown over these five years.

We have compared the revenue expenditures with the O&M financial requirements which are useful for practical purposes, the results of which are analysed in the previous sections. It comes out clear that the revenues as well as expenditures in the ULBs in Jharkhand are lower than required by all standards.

Table 7 Finances in the ULBs of Jharkhand: Some Estimations

Indicators	Below 25000	25,000-50,000	50,000-75,000	75,000-1,00,000	Above 1,00,000	Jharkhand
Per Capita Gross City Products (in Rs, per annum) Median (Minimum, Maximum)	7,654 (5,885, 17,107)	12,574 (5,695, 22,984)	10,974 (7,527, 12,198)	12,541 (8,233, 15,227)	14,166 (7,654, 22,984)	11,498 (5,695, 22,984)
Own revenue to GCP Ratio (per cent) Median (Minimum,Maximum)	0.15 (0.07,1.47)	0.17 (0.05 ,0.43	0.28 (.16, 0.82)	0.58 (.13, 0.73)	0.09 (.01, 0.51)	0.17 (0.01, 1.47)
Own Revenue Capacity (Rs, Per Capita, 2004-05 Prices) Median (Minimum,Maximum)	115 (88, 257)	189 (35, 345)	165 (113, 183)	188 (23, 228)	212 (115, 345)	172 (85, 345)
Revenue capacity (Rs, Per Capita,2004-05 Prices) Median (Minimum,Maximum)	592 (113, 2,883)	356 (85, 599)	269 (183, 1,192)	296 (205, 349)	294 (158, 813)	345 (85, 2,883)
Revenue Capacity to Actual Revenue (Index) Median (Minimum,Maximum)	130 (101, 3,853)	177 (121, 1154)	210 (104, 623)	192 (135, 252)	284 (122, 702)	177 (101, 3,853)

Source: Field Survey, NIPFP, Authors' Computations, Table A 2(Appendix)

It would be interesting to have an estimate of their maximum revenue generation potentials. This is called revenue capacity. We use a simple methodology to address a complex issue due to data constraint. The second set of estimations deal with gross city products (GCPs) and revenue capacities. The results are tabulated in Table 7.

Data on GCPs are not readily available for Jharkhand. We use the non agricultural component of the per capita Gross District Domestic Products (GDDP) for each city situated in a district and have generated the absolute GCPs by multiplying the respective population of each city. We find that though the GCP in per capita terms is the highest in the highest size class of cities (Rs 14,166) and lowest (Rs 7,654) in the lowest size class of cities on an average, we cannot say that there is a uniform positive relation between size class of cities and the per capita GCPs (average). However it is interesting to note that the average across all cities is closer to the higher size class averages. This also indicates that there is a considerable degree of variation in GCPs across size classes and in a particular size class.

In order to estimate revenue capacities, we start from the own revenue to Gross City Product (GCP) ratios of the ULBs in Jharkhand. We calculate the own revenue to GCP ratios and find that on an average Jharkhand cities generate only 0.17 per cent of their GCPs as own revenues. The ratio is more or less the same in the first two size classes, rises a little in the next, record a considerable rise in the 75,000 to 1 lakh population size class and then falls considerable in the 1 lakh plus city size class. If we compare the revenue generation figures we find that in the larger cities in Jharkhand, not only is the revenue generation levels unsatisfactory but also the revenue mobilization capabilities as indicated by the lower own revenue to GCP ratios.

As a first step to revenue capacity calculations, we assume the ULBs to generate at least 1.5 per cent of their GCPs as own revenues and calculate the revenue capacities of each city. We add the existing levels of grants to the estimated own revenue capacities to generate the total revenue capacities. All calculations are based on the data for the year 2004-05. We find that the revenue capacities estimated on an average generate additional revenues of 77 per cent for the ULBs in Jharkhand. The increase in total revenues would be the highest (184 per cent) for the 1 lakh plus cities and the lowest (30 per cent) for the smallest size class of cities.

Conclusions

The paper brings together different aspects of finances and service delivery of the ULBs in Jharkhand. This is an attempt to analyse the performances of the ULBs in raising finances and managing expenditures and relate them to the performance in provision of services. In the absence of data on per capita levels of physical service provision and some well defined demand indicators like income, or value of assets/properties owned by the households, the paper instead of giving a concrete evaluation, attempts an objective assessment to the extent possible.

In the process we have several evaluation indicators in terms of different components of actual revenues and expenditures, norms for financial requirements in Indian cities, coverage indicators for services. We have estimated the revenue capacities and have evaluated the shortfalls from actual revenues. Estimations of financial requirements are also given in different scenarios of service provision for different size classes of ULBs. Shortfalls of these requirements are also evaluated from the actual expenditures.

There is an overdependence on grants from the upper tiers of the government. Many of the sources of revenues which are shared with the upper tiers of the government in other states are not present. The expenditures incurred on core services also are lower than those prescribed by the norms for Indian cities. The performances of the ULBs by all indicators show a very low standard. The service delivery and other indicators, most of which record a lower standard than many of the states and also all India averages, can somewhat be explained by the low levels of revenues and expenditure levels and vice versa.

Some brief comparisons on finances and service provision are attempted with a number of ULBs in West Bengal which have a similar topography as the region we have chosen is adjacent to that of the state of Jharkhand.[9] Though the indicators do not show a very satisfactory trend, we mostly find somewhat better fiscal indicators as well as better service provision in the ULBs of West Bengal than those of Jharkhand. This somehow provides an evidence in favor of the hypothesis that a better fiscal management can bring about a better service provision in the urban sector in India.

[9]In the absence of data on Gross District Domestic Product for West Bengal for the time period of analysis, revenue capacity estimations are not possible for the UlBs of the state, however.

APPENDIX

Table A 1: Financial Requirement of ULBs in Jharkhand according to size classes and Services Provided (2004-05 prices)

Population/ Financial Requirement	Category of Services	Below 25,000	25,000-50,000	50,000-75,000	75,000-1,00,000	Above 1,00,000	Jharkhand Median
O &M Financial Requirement using 2004-05 Population (Median) (Minimum, Maximum) (in Rs lakhs)	3 services	94.2 (40, 117)	229.9 (138, 275)	324.4 (283, 368)	437.9 (431, 495)	723.5 (564, 3,411)	267 (40, 3,411)
	4 Services	118.8 (51, 147)	289.8 (174, 346)	409.0 (357, 465)	552.0 (543, 624)	932.0 (711, 4,395)	336 (51, 4,395)
	5 Services	159.0 (68,197)	388.0 (233, 464)	547.5 (478, 622)	739.1 (727, 836)	1273.6 (952, 6,496)	450 (68, 6,496)
Capital Financial Requirement using 2004-05 Population (Median) (Minimum, Maximum) (in Rs Lakhs)	3 services	1902.3 (814, 2,360)	4640.9 (2,791, 5,545)	6549.3 (5,717, 7,439)	8840.6 (8,701, 9,995)	13651.0 (11,384, 9,3770)	5,382 (814, 93,770)
	4 services	2175.7 (931, 2,699)	5308.0 (3,192, 6,342)	7490.8 (6,538, 8,509)	10111.4 (9,952, 11,432)	15972.1 (13,021, 1,09,713)	6,156 (931, 1,09,713)
	5 services	2623.3 (122, 3,254)	6400.1 (3,848, 7,647)	9031.9 (7,884, 10,259)	12191.7 (12,000, 13,784)	19771.7 (15,700, 1,35,814)	7,422 (1,122, 1,35,814)
O &M Financial Requirement using 2009-10 Population (Median) (Minimum, Maximum) (in Rs Lakhs)	3 services	94.8 (45, 126)	240.6 (149, 305)	313.2 (254, 421)	507.9 (460, 552)	737.9 (530, 3,431)	278 (45, 3,431)
	4 Services	119.5 (57, 159)	303.4 (188, 385)	394.9 (320, 531)	640.3 (580, 696)	950.6 (669, 4,420)	351 (57, 4,420)
	5 Services	160.0 (76, 213)	406.1 (252, 515)	528.7 (429, 711)	857.3 (776, 932)	1299.0 (895, 6,629)	469 (76, 6,629)
Capital Financial Requirement using 2009-10 Population (Median) (Minimum, Maximum) (in Rs Lakhs)	3 services	1914.1 (908, 2,550)	4858.1 (3,014, 6,162)	6323.7 (5,132, 8,505)	10254.9 (9,287, 11,154)	13922.7 (10,710, 95,689)	5,615 (908, 95,689)
	4 services	2189.3 (1,038, 2,916)	5556.5 (3,448, 7,048)	7232.7 (5,869, 9,727)	11728.9 (10,622, 12,757)	16290.0 (12,250, 1,11,960)	6,422 (1,038, 1,11,960)
	5 services	2639.7 (1,252, 3,516)	6699.6 (4,157, 8,497)	8720.8 (7,077, 11,729)	14142.0 (12,807, 15,382)	20165.3)14,770, 1,38,594)	7,743 (1,252, 1,38,594)

Source: Field Survey, NIPFP, Authors' Computations, Table A 2, Table A3

Notes: 3 services include Street Light, Roads and Solid Waste Management

4 services include Street Light, , Roads, Solid Waste Management and Water Supply

5 services include Street Light, Roads, Solid Waste Management, Water Supply and Sewerage

Table A 2 Financial Requirements (Rs, Per Capita, 2004-05 Prices) According to Norms for ULBs of Jharkhand

Norm Category	Services	Below 25,000	25,000-50,000	50,000-75,000	75,000-1,00,000	Above 100,000
O&M Requirements	Water Supply	144	144	144	144	144
	Sewerage	236	236	236	236	236
	Solid Waste Management	226	226	226	226	226
	Total Roads*	313	313	313	313	262
	Storm Water Drains	15	15	15	15	15
	Street Lights	12	12	12	12	11
Capital Investment Requirements	Water Supply	1,601	1,601	1,601	1,601	1,601
	Sewerage	2,620	2,620	2,620	2,620	2,620
	Solid Waste management	565	565	565	565	565
	Total Roads	10,436	10,436	10,436	10,436	8,728
	Storm Water Drains	679	679	679	679	679
	Street Lights	134	134	134	134	121

Source: Estimates of Urban Infrastructure Financing Requirements in India, 2006-2031 (Draft), Ramanathan and Dasguptaa (2009)

* For roads, norms are taken as 15per cent of the norms estimated in Ramanathan and Dasguptaa (2009)

Table A 3 Financial Norms (Rs, Per Capita) for Indian Cities (2004-05 Prices)

Norm Category	Services	IA	IB	IC	II	III	IV+
O & M Requirements	Water Supply	355	179	144	144	144	144
	Sewerage	137	160	236	236	236	236
	Solid Waste Management	165	72	226	226	226	226
	Total Roads	1,246	1,803	1,746	2,087	2,087	2,087
	Storm Water Drains	12	20	15	15	15	15
	Street Lights	7	9	11	12	12	12
Investment Requirement	Water Supply	3,944	1,994	1,601	1,601	1,601	1,601
	Sewerage	1,525	1,773	2,620	2,620	2,620	2,620
	Solid Waste management	411	180	565	565	565	565
	Total Roads	41,538	60,093	58,185	69,576	69,576	69,576
	Storm Water Drains	522	877	679	679	679	679
	Street Lights	74	102	121	134	134	134

Source: Estimates of Urban Infrastructure Financing Requirements,2006-2031(Draft), Ramanathan and Dasguptaa (2009)

Notes: Class IA- Population above 4 million
Class IB- Population between 1 million and 4 million
Class IC- Population between 1,00,000 and 10,00,000
Class IV+- Population below 20,000

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