# Financing Metropolitan Governments *in* Developing Countries

*Edited by*

Roy W. Bahl, Johannes F. Linn, and Deborah L. Wetzel

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# Metropolitan Public Finances

## 10

*The Case of Mumbai*

ABHAY PETHE

## Conceptual-Contextual Background

Urban spaces in India are increasingly important (Mohan 2007). The future of India is significantly urban since globalization requires global city spaces.[1] This chapter is informed by the conviction that governance is key in considering issues related to both interurban and intraurban institutions and organizations and involves agents, agencies, and their interactions. Metropolitan government is an artificial, rather than organic, conceptual construct and should be considered as an emergent system, more complex than cities, generated by and generating interactions among many public and private organizations and civil society. Such evolving metropolitan governance in India resembles a "polycentric governance" system (see Pethe, Gandhi, and Tandel 2011; Pethe et al. 2012; Pethe, Tandel and Gandhi 2012).

Over the last few decades, India's pattern of urbanization has become distinctly top-heavy, as evidenced by the rapid growth of urban agglomerations and increased

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[1] Some academics (see, e.g., Sassen 2010) believe we have reached a tipping point where cities and city-states are becoming more important economic categories than nation-states, which are becoming less important, if not redundant, because of global capital and technology.

numbers of cities with populations of 1 million or more (Kundu 2006).[2] The significant agglomeration economies arising from large metropolises feed into the economy in the form of higher economic efficiency and productivity growth (Mohan 2006).

The passage in India of the 73rd and 74th constitutional amendment acts (CAAs) in 1992–1993 was a significant reform addressing decentralization. It was meant to improve the management of local governments and to promote better public service delivery. The process of decentralization, however, remains far from satisfactory in the de facto sense and lacks true empowerment of urban local bodies (ULBs). Decentralization in major urban regions is further complicated by the strong presence of central and state governments, via their parastatals, in providing urban infrastructure.[3]

In an attempt to understand public finance in metropolitan regions, this chapter presents an analysis of the issues faced by one of the most important urban agglomerations in India: the Mumbai metropolitan region (MMR). Slack (2007, 15) terms the governance structure in Mumbai the "one-tier fragmented government model." It is important to recognize linkages with and participation of the central and state governments in the region. This direct participation can be attributed to the fact that the region contributes 70 percent of state-level and more than 11 percent of national-level tax revenues. The MMR may be characterized as the "goose that lays the golden egg," a strong economic engine that creates a stake for the higher levels of governments to remain invested in the region so that growth is sustained. However, given the set of problems the region faces in terms of inadequate infrastructure and poor livability, the extent of investments in the region by higher-level governments is not in sync with the level of return that accrues to them. This chapter highlights the structure of public finance and governance in MMR and considers problems and policy reform options.

## Fiscal Federalism in India: Setting the Context

India has been characterized as a union with centripetal bias. The 73rd and 74th CAAs implied that urban and rural local bodies will no longer be construed as mere creations of the state governments. The 74th CAA recognizes ULBs as the third tier in the Indian federal structure and entrusts them with a list of functions (in Schedule 12 of the CAA) and sources of revenues, in a de jure sense (see chapter 3).[4] ULBs are classified as municipal corporations and municipal councils based on the population criterion.

Apart from their own-source revenue handles, these ULBs were to be empowered through grants from the center and respective state governments, which may

[2] However, the 2011 census figures (Census of India 2011) actually show a decline in metropolitan city populations (although not in agglomerations) and the addition of more than a thousand new cities and towns.

[3] Parastatals are similar to state-owned enterprises and are headed by state/center-government-nominated CEOs.

[4] The de jure provisions have not led to de facto changes. The state governments continue to treat the ULBs as their own creations and exercise statutory control over most financial decisions. As an aside, the Reserve Bank of India categorizes the debt by ULBs as private debt (for details, see, e.g., Pethe, Mishra, and Rakhe 2009 and Pethe 2010 for further elaboration).

be tied or untied, as well as transfers that were formulated by the finance commissions. However, ULBs have remained small in size and unable to shoulder their expenditure responsibilities, primarily because of limited autonomy on the revenue and expenditure sides of the budget, and because of limited inflow in intergovernmental transfers. The importance of devolving the "three Fs," functions, finance, and functionaries (personnel), is not recognized in the de facto sense (see Pethe and Lalvani 2008).

The Indian tax system is set up with an asymmetry in the growth dividend that accrues in favor of the central government.[5] In contrast, states are constitutionally required to undertake many responsibilities, with implications for pressure on infrastructure provision and current expenditure budgets. These are effectively unfunded mandates. Further, reforms in the arena of fiscal operations, such as the central Fiscal Responsibility and Budget Management Act (2003) and related state-level fiscal responsibility legislation, severely constrain revenue expenditure capacity of the states, with consequent shrinkage of the discretionary fiscal space for the state.[6] In this situation, it is difficult to contemplate statutory devolution by states of untied grants to the ULBs (e.g., through the state finance commission awards), rendering them financially weak.

## An Overview of the Mumbai Metropolitan Region

The MMR, located on the western coast of India in the state of Maharashtra, extends over an area of 4,355 square kilometers, comprising 1,242 square kilometers of urban area, of which Greater Mumbai covers 437 square kilometers. With about one-tenth of the area compared with MMR, Greater Mumbai, defined by the jurisdiction of the Municipal Corporation of Greater Mumbai (MCGM), accommodates a population of around 12.5 million, which constitutes almost 60 percent of the total population of MMR. It is evident that Mumbai is a financial and commercial powerhouse and an overwhelmingly important economic center not just for the region or the state but, indeed, for the whole country (see Pethe 2005). Of the total outstanding credit in India, 27 percent is from Mumbai. The Bombay Stock Exchange and National Stock Exchange account for 80 percent of the value of all transactions in stock markets. The same order of magnitude is seen in annual merchant turnover and registration of mutual funds and foreign institutional investments. MMR's transport system handles some of the heaviest (local, national, and international) passenger and cargo traffic in India.[7] The city of Mumbai is packed with a density close to 30,000 persons per square kilometer.[8] The production structure of the local economy comprises 80 percent services, with implications for the

[5] This is especially important since incremental growth in the production structure of the Indian economy has been severely biased in favor of the service sector, which can be taxed only by the central government.

[6] While the Fiscal Responsibility and Budget Management Act and the state-level fiscal responsibility legislation are steps in the right direction, these have had unintended effects on expenditure autonomy of states. The concept of revenue expenditure/deficit needs to be revisited and refined.

[7] This importance is being challenged by the creation of the world-class airport at New Delhi.

[8] The actual density is much higher due to a floating population estimated at between 3 million and 5 million. This puts greater pressure on infrastructure. MMR represents the classic labor market, albeit employment here is largely informal in nature.

requisite skill sets for employability and livelihoods. The per capita income is double the average of the state and around three times the national average. MMR is thus a huge attractor for in-migration.[9]

Other than MCGM, corporations and councils in the region comprise 805 square kilometers. The total population of MMR was 18.8 million according to the 2001 census (Census of India 2001). The annual population growth rates have been approximately 1.9 percent and 2.7 percent for Mumbai and MMR, respectively, during the 1990s and 2000s, with migration, expectedly, playing a significant role. Thus, the population for MMR in fiscal year 2008–2009 is estimated to be approximately 22 million.[10] MMR accounted for 33.24 percent of gross state domestic product of Maharashtra and 4.34 percent of India's gross domestic product in 2008–2009.[11]

ULBs in Maharashtra are governed by the following four Acts, in addition to the 74th CAA: the Bombay Municipal Corporation Act (1888); the City of Nagpur Corporation Act (1948); the Bombay Provincial Municipal Corporations Act (1949); and the Maharashtra Municipal Councils, Nagar Panchayats and Industrial Townships Act (1965). The state is currently involved in a reconciliation exercise to create a single uniform Act governing all the ULBs in the state.

The currently existing eight municipal corporations and nine municipal councils in MMR are largely responsible for performing the 18 functions listed in the 12th Schedule of the 74th CAA, which include provision of public goods. The ULBs face severe budgetary constraints in successfully meeting these responsibilities.

Besides local governments, the state government also undertakes infrastructure investments through the numerous parastatals it has set up in MMR. These parastatals have been constituted to perform certain specific functions. Some of the most prominent state-level parastatals are the Mumbai Metropolitan Region Development Authority (MMRDA), which is a planning agency for MMR; the Maharashtra State Road Development Corporation under the Department of Public Works, which develops roads, bridges, and overpasses in MMR, as well as the rest of Maharashtra; and the Maharashtra Housing and Area Development Authority (MHADA) and Slum Rehabilitation Authority set up by the Department of Housing for providing affordable housing and slum rehabilitation. Several parastatals have also been set up by the central government, such as the Airport Authority of India and the different port trusts, railway boards, and others that are currently located in MMR.[12] The central government is also investing in MMR through

[9] According to the current exchange rate, US$1 equals 50 Indian rupees.

[10] Based on the provisional census estimates (2011), (Census of India 2011) the annual population growth rate from 2001 to 2011 was 3.57 percent, with a decadal growth rate of 42 percent. MMR's population in 2011 was approximately 26 million. With this growth rate, the population in MMR in fiscal year 2008–2009 would be around 24 million. These estimates seem to be on the lower side.

[11] In fiscal year 2000–2001, MMR's income was estimated to be Rs.787,377.8 million, which amounts to 86.84 percent of the total incomes of Mumbai, Raigad, and Thane taken together. MMR's income in the year 2008–2009 accounts for approximately 89.2 percent of the total income of the three districts and is estimated to be Rs.1,490,279.1 million. The proportion of MMR's income in the income of the three districts would increase over time because of the increasing pace of urbanization, influx of population in MMR, and other factors. MMR has been witnessing an average annual growth rate of about 8.34 percent from 2000–2001 to 2008–2009. Such a growth rate is expected to be accompanied by commensurate public and private investments in the region.

[12] The complete list of all parastatals can be found in the business plan for MMR by MMRDA and LEA International Ltd. (2007). One notices not just a lack of coordination among these different arms of government but that they frequently are involved in large numbers of time-consuming litigations.

centrally sponsored schemes, the most noteworthy being the Jawaharlal Nehru National Urban Renewal Mission (JnNURM).[13]

The Metropolitan Planning Committee (MPC) was set up following Article 243ZE of the 74th CAA in order to facilitate better coordination at the metropolitan level, creating a power conflict with MMRDA.[14] The MPC comprises elected representatives from all the ULBs and has the task of preparing a draft development plan for the metropolitan region (Joardar 2008). Besides public organizations, considerable investment is being made by the private sector in the region.

MMR is facing considerable problems in terms of proliferation of slums, lack of affordable housing, transport issues, poor quality of sanitation and drainage, and aged water supply and sewage systems. Further, the situation worsens farther from the city core. Thus, although a gamut of public and private organizations, as discussed previously, have been involved in financing infrastructure in the region, inadequate investments and inefficient delivery of public goods and services still exist. Analyzing the magnitude and trends of investment by these organizations would help estimate the extent of investment deficit in the region.

## ULB Finances

The size of the urban local government in MMR, measured as percentage of revenue and capital expenditure to gross district domestic product, is estimated to be 5.59 percent of the local economy for the period from 2002–2003 to 2007–2008.[15] The size of MCGM for the same period was 6.61 percent of Mumbai's income, whereas the size of the other ULBs in MMR amounted to 3.35 percent of the economy of the rest of MMR (excluding Mumbai districts under MCGM). Investments made by ULBs in MMR from 2005–2006 to 2007–2008 comprised around 44.65 percent of total public investments in the same period.[16] It is important to recognize that Mumbai is a special case. Typically, local (city/town) government is quite small. The implication is that such small (and consequently weak) local governments are unable to play a comprehensive role in governance (as envisaged by the constitutional amendments related to decentralization), and civic administration of cities and towns.[17] The following sections analyze the expenditure and revenue

[13] Centrally sponsored schemes aim to attain certain socioeconomic objectives where the outcomes have been deemed unsatisfactory. These are introduced by ministries and departments in the central government and provide conditional grants to the state governments for implementing the schemes via state-level departments or parastatals. By definition, these deal with matters of importance for the citizens that appear in the concurrent constitutional list. Hence, there is an element of perceived encroachment of autonomy by the center on the domain of the states. For more on the nature of centrally sponsored schemes, see Pethe et al. (2010).

[14] The MPC was set up almost reluctantly and with considerable delay. The first couple of meetings that were held were largely unproductive (time spent in technical wrangles). How this will affect MMRDA's power and authority has yet to be determined.

[15] This is probably an overestimate since the tally of investments made by all the non-ULB public bodies, projects, and schemes is not complete.

[16] This is probably an overestimate since the tally of investments made by all the non-ULB public bodies, projects, and schemes is not complete.

[17] Data for most of the years since the 74th CAA (1992) was passed are incomplete and have been acquired from different data sources, leading to major issues of data reconciliation. Hence, here the analysis is limited to the five years between 2002–2003 and 2007–2008, which is sufficient to give an idea of the performance of decentralization in MMR, which has not changed drastically since that time. The work here is similar to that of Pethe and Lalvani (2007).

patterns of ULBs in MMR. Since MCGM overpowers the other ULBs in terms of its size, its finances are examined independently. The public finances of ULBs are analyzed by dividing them into three categories: MCGM, other municipal corporations (OMCs), and municipal councils (COs).[18]

### *Expenditure Patterns of ULBs in MMR*

Examining expenditures can provide a rough idea of public goods and services provision by ULBs in MMR. The shares of MCGM, OMCs, and COs in MMR are given in figure 10.1, which shows that MCGM is indeed the largest ULB in the region: its share in the total expenditures made of all the ULBs in MMR amounted to more than 80 percent, while OMCs accounted for around 18 percent, and COs, around 2 percent. Not only is MCGM the dominant player, but also its proportionate role is increasing over time (even compared with OMCs).[19] It is well documented that, despite being inadequate, the magnitude and quality of public goods and services are far superior both to those elsewhere in India and to those in the places within MMR outside the administrative limits of MCGM (see MCGM 2009).

The expenditures of ULBs can be classified as revenue and capital expenditures. Revenue expenditures largely involve establishment and administration costs, as well as costs of operation and maintenance of assets. The range of functional responsibilities, as mentioned earlier, is given in the 12th Schedule of the Indian Constitution inserted after the 74th CAA. This comprises 18 functions that were to be transferred to the local bodies, along with the funds and functionaries. The list includes such items as primary education, health (in case of MCGM only; for other councils in MMR it is looked after by the state), street cleaning and lighting, water and sanitation, fire brigades, and museums and public libraries. The salaries of the employees involved in delivering these services are included in establishment costs. Capital expenditures involve asset creation expenditures. The breakdown of capital and revenue expenditures of MCGM, OMC, and CO in per capita terms is provided in table 10.1.

In per capita (real) terms, both capital and revenue expenditures have been increasing over the years for all categories. The proportion of revenue expenditure to total expenditure is much higher for MCGM than for OMC and CO.[20] This is indicative of the economies of scale not being realized in revenue expenditures, even considering that the capital investments are of a higher order and the quality of services are superior within the MCGM jurisdiction.

[18] The OMCs comprise six municipal corporations. The Vasai Virar Municipal Corporation, formed in November 2010, is not included in this category; however, the municipal councils that make up the new corporation have been incorporated in the CO category.

[19] MCGM is, in a way, a state within a state. The population of the city is more than that of 50 countries and 17 states in the Indian Union, and its aggregate revenue exceeds that of 16 of these states. Thus, when one discusses the size of the government and decentralization, it is important to keep in mind that while the size may appear satisfactory, as averages go, it hides the fact that ULBs other than MCGM are quite small and weak. Thus, the magnitude and quality of urban services suffer as one moves farther from the MMR core. For a comparison of MMRDA and MCGM, see Pethe, Gandhi, and Tandel (2011).

[20] The exception is in fiscal year 2007–2008, when the proportion of revenue to total expenditure for OMC was marginally higher than that for MCGM.

FIGURE 10.1
ULB expenditures as percentages of total MMR expenditures

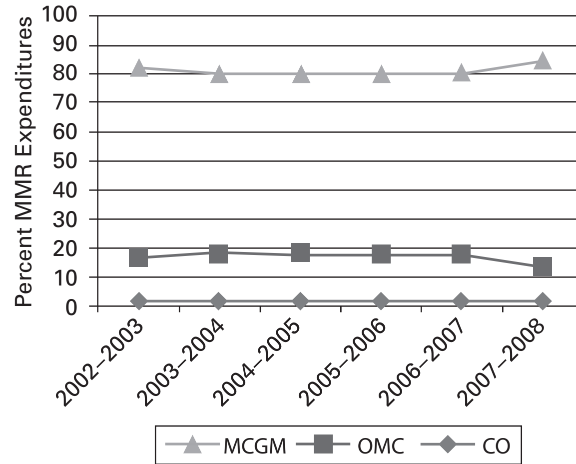


TABLE 10.1
Per capita expenditures in 1999–2000 prices (Rs.)

| | MCGM | | OMC | | CO | |
|---|---|---|---|---|---|---|
| Fiscal year | Revenue | Capital | Revenue | Capital | Revenue | Capital |
| 2002–2003 | 2810 | 523 | 1151 | 572 | 609 | 245 |
| 2003–2004 | 2852 | 551 | 1293 | 640 | 657 | 257 |
| 2004–2005 | 3169 | 485 | 1465 | 645 | 710 | 249 |
| 2005–2006 | 3009 | 791 | 1509 | 670 | 855 | 285 |
| 2006–2007 | 3426 | 1080 | 1538 | 971 | 1037 | 441 |
| 2007–2008 | 4569 | 1918 | 1588 | 1113 | 993 | 488 |

SOURCE: Calculations based on data from the Directorate of Municipal Administration.

An analysis of expenditures on different components of MCGM provides an overall picture of expenditure allocation (this is a reasonable proxy since this represents an overwhelming proportion of total expenditures). Table 10.2 shows a steady pattern headed in the "right" direction. Establishment expenditures constitute the largest share of revenue expenditures, albeit declining marginally. The question is whether enough is being spent by way of repairs, operations, and maintenance of public goods. Capital expenditures comprise two categories, mandatory public services (PS1) and mandatory plus merit goods (PS2).[21] The

[21] PS1 (public goods, category 1) comprises the mandatory services that must be delivered by the ULBs that are in the nature of pure public goods. PS2 (public goods, category 2) comprises extended services and includes goods in the PS1 category plus merit goods that can technically be privatized since their consumption can be excluded and no joint consumption is involved. PS2 shows a relatively large increase mainly due to water projects that involve greater costs because the water has to come from farther away. For details, see Karnik, Pethe, and Karmarkar (2006).

**TABLE 10.2**
Composition of MCGM expenditures

| Expenditure | 2002–2003 | 2003–2004 | 2004–2005 | 2005–2006 | 2006–2007 | 2007–2008 |
|---|---|---|---|---|---|---|
| Capital Expenditure (% of total) | 16 | 16 | 13 | 21 | 24 | 30 |
| Establishment Expenditures (% of Revenue Expenditure) | 55 | 54 | 50 | 59 | 48 | 43 |
| PS1* (% of total) | 11 | 9 | 5 | 8 | 15 | 15 |
| PS2** (% of total) | 14 | 14 | 11 | 16 | 19 | 24 |

*Public services, category 1: capital expenditures on core public services, such as drainage, sanitation, fire fighting, and others that must be provided by the public sector.

**Public services, category 2: capital expenditures on core public services plus some other merit goods, such as health, water, and sanitation.

SOURCE: Calculations based on data from the Directorate of Municipal Administration.

discrepancy between the share of PS2 and share of PS1 in total expenditure arises from the exclusion of some items vaguely titled "other expenditures," which is nontransparent.

## *Revenue Patterns of ULBs in MMR*

### OWN-SOURCE REVENUES

Revenues of ULBs in MMR constitute own-source revenues and external revenues. Own-source revenues are further classified into tax and nontax revenues. The most important taxes collected by ULBs are *octroi* (a tax levied on goods entering the jurisdiction of the local government by setting up various checkpoints) and property tax. Nontax revenues comprise the different user fees or charges levied on consumers of different public goods. The patterns of own-source revenues in per capita terms of ULBs in MMR from 2002–2003 to 2007–2008 are shown in table 10.3.

While both tax and nontax revenues have been increasing for the OMCs, nontax revenues of COs have been fluctuating. There has been a feeling (although not backed by much solid research) that much more improvement could be achieved in the nontax revenues by rationalizing charges. The predominant role of Mumbai (going back to the goose that lays the golden egg argument) and the high cost of living in Mumbai proper can be seen from the fact that, even in per capita terms, the tax burden is significantly higher in Mumbai than in other parts of MMR. Indeed, the ratio of tax to relevant gross domestic product works out to around 4.3 percent for Mumbai, compared with 2.16 percent for the rest of MMR.

To give a clear idea of the composition of revenues, a breakdown of own-source revenues by item for the OMCs is shown in table 10.4. Despite Mumbai being the entertainment capital of India, the entertainment tax collections are almost negligible, and in fiscal years 2002–2003 and 2005–2006 there was no revenue from this source, because the state government collects this tax and does not pass it on to the

**TABLE 10.3**
Per capita own-source revenue in 1999–2000 prices (Rs.)

| | MCGM | | OMC | | CO | |
|---|---|---|---|---|---|---|
| Fiscal year | Own Tax | Own Nontax | Own Tax | Own Nontax | Own Tax | Own Nontax |
| 2002–2003 | 2,236 | 1,060 | 1,102 | 426 | 412 | 221 |
| 2003–2004 | 2,317 | 1,031 | 1,233 | 528 | 451 | 203 |
| 2004–2005 | 2,478 | 1,149 | 1,348 | 514 | 415 | 128 |
| 2005–2006 | 2,691 | 1,210 | 1,534 | 570 | 520 | 168 |
| 2006–2007 | 3,260 | 1,308 | 1,675 | 645 | 583 | 231 |
| 2007–2008 | 3,390 | 1,689 | 1,898 | 795 | 631 | 176 |

SOURCE: Calculations based on data from the Directorate of Municipal Administration.

ULBs. Tax on "entertainment," as well as on "profession," from an economist's perspective is essentially a local tax (albeit not explicitly included in the 12th Schedule list of functions of ULBs), but neither is collected by the local governments (with only a small part of the latter being passed on by the state). Vehicle taxes, despite the exponential increase in numbers of vehicles, have remained constant over the years and are a negligible proportion of the total revenue incomes.[22] Although the share of user charges in own-source revenues is increasing, these charges are far from rationalized (see chapter 8), which is hampered by the political economy's aversion to charges.

Octroi commands a lion's share of own-source revenues for all municipal corporations, while the shares of property tax have been low. Below is a detailed discussion on octroi and property tax. First, however, buoyancies of the two tax sources for the period from 1995–1996 to 2007–2008 for MCGM and OMCs are provided in table 10.5.[23] The buoyancies have been estimated as the responsiveness of the revenues from the tax to changes in gross district domestic product for the series, in constant prices. The data have been acquired from different sources; hence, for data reconciliation, the buoyancies for three subperiods have been analyzed: 1995–1996 to 1999–2000, 2000–2001 to 2004–2005, and 2002–2003 to 2007–2008. Since these are computed on the basis of "actual accounts figures" rather than the estimated/budgeted figures, they include the effect of discretionary changes/actions by the enforcing officers and hence do not reflect the underlying rate structures.

Octroi tax, as a tax on entry of goods in a particular jurisdiction, is for various reasons recognized as an inefficient tax. It has been banned by all states in India other than Maharashtra, which has repealed octroi for all ULBs except municipal corporations (Rath 2009). The buoyancy of octroi for MCGM and OMC (except during 2000–2005) has exceeded 1 (table 10.5), and it comprises 45 percent of the

[22] Vehicle taxes are not included in table 10.4 because the data source does not explicitly include it. The findings given here on vehicle taxes are based on recent MCGM budgets. A related tax is collected and retained by the state government.

[23] Buoyancy of a tax is defined as the responsiveness of the tax to the changes in the tax base. This is an essential quality for determining the efficiency of the design of a tax.

**TABLE 10.4**

Breakdown of own-source revenue by item (percent)

| Item | MCGM | | | | | | OMC | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2002–2003 | 2003–2004 | 2004–2005 | 2005–2006 | 2006–2007 | 2007–2008 | 2002–2003 | 2003–2004 | 2004–2005 | 2005–2006 | 2006–2007 | 2007–2008 |
| Property tax | 24 | 24 | 23 | 23 | 25 | 22 | 21 | 22 | 21 | 20 | 20 | 22 |
| Entertainment | 0 | 0.08 | 0.01 | 0 | 0.06 | 0.08 | 0 | 0 | 0 | 0 | 0 | 0 |
| Octroi | 44 | 45 | 45 | 46 | 46 | 45 | 51 | 48 | 51 | 53 | 52 | 49 |
| Water charges | 10 | 9 | 8 | 8 | 6 | 5 | 11 | 13 | 11 | 10 | 10 | 10 |
| Fees/user charge | 17 | 16 | 18 | 18 | 19 | 25 | 14 | 13 | 14 | 14 | 16 | 17 |
| Sewerage | 6 | 5 | 5 | 5 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Any other | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 2 | 3 | 2 | 3 |

SOURCE: Calculations based on data from the Directorate of Municipal Administration.

**TABLE 10.5**
Buoyancy of octroi and property taxes

| Government component | 1995–1996 to 1999–2000 | 2000–2001 to 2004–2005 | 2002–2003 to 2007–2008 |
|---|---|---|---|
| ***Buoyancy of octroi*** | | | |
| MCGM | 1.45 | 1.47 | 1.66 |
| OMC | 1.34 | 0.806 | 1.49 |
| ***Buoyancy of property tax*** | | | |
| MCGM | 1.65 | −0.17 | 0.96 |
| OMC | 2.62 | 0.15 | 0.99 |

SOURCE: Calculations based on data from the Directorate of Municipal Administration.

own-source revenues for MCGM and 50 percent for OMC (table 10.4), thus making octroi an important as well as buoyant revenue source. Thus, the repeal of octroi for corporations in MMR will not only strongly and negatively affect the revenues of corporations but also burden the state government, which has to compensate with an in-lieu grant, which would be of unmanageable magnitude. For both the octroi and property tax, the relevant laws stipulate some band or range setting of rates and base that is within the purview of ULBs. While there has been an in-principle consensus on abolishing the octroi and rationalization of property tax, unfortunately, action has been found wanting.

Property tax commands approximately 20–24 percent of own-source revenues for MCGM and OMC (table 10.4). This share of property tax has been unsatisfactory given the high land values of the region, especially in Mumbai district. Moreover, property tax buoyancies have been erratic. The period from 2000–2001 to 2004–2005, surprisingly, witnessed a buoyancy of property tax of 0.17 for MCGM and for OMCs, significantly less than 1, thus confirming that the property tax system in MMR, and more so in Mumbai, is suffering from some major flaws. The extant system of property tax is based on the rental value system. Rents in Mumbai city have been severely constrained under the Rent Control Act (1999), thus constraining the potential property tax revenues (see Karnik, Rath, and Sharma 2004; Pethe and Lalvani 2007).[24] However, there has been some increase, in absolute terms, in the property tax collection, largely due to (1) absence of rent control in the suburbs of Mumbai, where tremendous real estate growth has occurred since 2000; (2) better administration; and (3) a shift from residential to commercial use within the city. However, compared with estimated property tax collections, collection efficiency has been a mere 45 percent, leaving much room for further improvement. There is also the contentious issue of different arms of government paying the property tax, which in the case of MMR has led to protracted litigations. Although

[24] The Rent Control Act applies to a host of buildings predominantly in south and central Mumbai built more than 70 years ago. Many of them are "cessed" buildings that pay a cess, which is a fee paid to MHADA for repairs and maintenance. This is because the owners have no incentive or capacity to pay for repairs and maintenance, because they get very little return, since the rents on their buildings are frozen.

it is true that the ratios of property tax to gross domestic product are typically low (around 0.6 percent) for developing countries and even perhaps lower in India as a whole, in Mumbai the ratio is 1.4 percent, reflecting difficulty in increasing the burden through this recourse. It is clear that rationalization of property taxes should become a focus and will lead to major increases in revenues from this source, especially since the market property rates have been increasing monotonically.

The study by Karnik, Rath, and Sharma (2004) pointed out the benefits of moving to a capital-value-based system of property tax in Mumbai. However, Bahl and Linn (1992) noted that, for any change in the property tax system, it is crucial to weigh the trade-off between the transition costs involved in bringing about the change and the future benefits of a better system. While administrative costs involved in shifting to the capital-value-based system are indeed rather high (*Daily News and Analysis* 2011), the benefit of this shift is significant because it would ensure that the tax system adheres to the principle of "goodness of law."[25] Also, it is felt that reforms in the property tax system would provide a way to eliminate octroi.

It is clear from the above sections that the ratio of total revenues and expenditures is inversely related to the size of the ULB: for MCGM it is 95 percent; for OMCs, 93 percent; and for COs, 61 percent. Thus, even given the current inadequate expenditures (in terms of quality of provision of goods and service delivery), there is need for additional revenues. The thrust will have to be on devolution (untied grants) and additional (transfer of) revenue handles, as well as rationalization of user charges and extant taxes. There is very little scope for increasing tax rates, given that the citizens in Mumbai are already burdened by composite tax rates of 42 percent, which comprises taxes shared by center (25 percent) and state (13.6 percent), with ULB tax share being 3.4 percent (Prud'homme 2007).

### GRANTS

Besides own-source revenues, the ULBs also receive grants from the state and central governments. In theory, awards by state finance commissions, regarding devolution of statutory untied grants from the state, should be implemented, leading to empowerment of ULBs and to improving the mismatch between expenditure assignments and revenue assignments. In practice, one sees only small ad hoc grants, and even the pass-through grants from the center are not administered efficiently, with the state governments taking undue shares in transferring the grants to the ULBs. In table 10.6, the intergovernmental grants, which include transfers from the central government as per the 11th and 12th Finance Commissions and grants-in-aid from the government of Maharashtra, are classified as "other revenues." Table 10.6 shows that the smaller the size of the ULBs, the greater their dependency of grants rather than on own-source revenues, with fiscal autonomy being the casualty. These flows create difficulty for planning because of the unpredictable and uncertain nature of these grants. Given the importance of grants in the finances of smaller ULBs, a more predictable formulaic basis for vertical sharing might be preferable (Pethe, Misra, and Rakhe 2009). Recognizing this, the 13th Finance Commission, a constitutionally recognized body set up to determine the sharing of

[25] For a report on the ramifications of the new property tax system, see *Times of India* (2011b).

**TABLE 10.6**
Other revenues as percentage of total revenue receipts

| Fiscal year | MCGM | OMC | CO |
|---|---|---|---|
| 2002–2003 | 2.45 | 8.49 | 34.59 |
| 2003–2004 | 2.31 | 2.69 | 39.67 |
| 2004–2005 | 2.32 | 3.73 | 43.42 |
| 2005–2006 | 2.38 | 2.98 | 40.39 |
| 2006–2007 | 3.24 | 4.39 | 42.54 |
| 2007–2008 | 2.27 | 4.88 | 25.51 |

SOURCE: Calculations based on data from the Directorate of Municipal Administration.

revenues from some sources between the center and the states, recommended that local bodies be transferred a percentage of the divisible pool fund.[26] This grant is subdivided into a basic and performance based component.

### REVENUE EXPENDITURE, REVENUE RECEIPTS, AND BORROWING CAPACITY

Shares of revenue expenditures in revenue receipts, which show how much of the revenue receipts are used to fund revenue expenses, are given in table 10.7. OMCs and COs are far from having the capacity to spend or to leverage revenue surpluses for financing capital expenditure. Considering the functions to be undertaken by the ULBs in MMR and given the actual situation of extant level of public amenities, it appears that financial capacity to deliver public goods and services by them is inadequate. It must be mentioned that generally, even within the available leeway, the ULBs tend not to exploit the full revenue potential by undertaking sufficient tax effort. If ULBs are to meet the kind of capital expenditures that are essential for adequate provision of public goods and services they would have to resort to borrowing from banks, financial institutions, and capital markets. The potential for debt from the capital market remains unexploited by the ULBs. This could be attributed to the weak financial health of the ULBs, which affects their rating and hence the confidence of investors (Bagchi and Kundu 2003). Also, the reluctance of the state government to guarantee municipal bonds impedes many ULBs in borrowing (Rao and Bird 2010).

Table 10.8 provides an estimate of the borrowing capacity of the ULBs in MMR. The total amount that these ULBs would be able to raise is only Rs.66,040 million, which falls far short of the required capital investments that should be raised through borrowing to finance infrastructure. On average, ULBs in MMR borrow 3–4 percent of their total revenue receipts. Borrowings of ULBs in MMR on the higher side (4 percent) would amount to around Rs.4,400 million, which is less than one-tenth of the potential borrowing capacity. The actual borrowings are not only lower but also not autonomous in nature, because they must be approved by

[26] Although the 13th (central) Finance Commission seems to have recognized the local bodies formally as a third tier of government, the State Finance Commission's recommendations are not being accepted (for various reasons and compulsions), especially on the financial front, by the state governments. See Pethe, Karnik, and Karmarkar (2003) for details.

**TABLE 10.7**
Revenue expenditures as percentage of revenue receipts

| Fiscal year | MCGM | OMC | CO |
|---|---|---|---|
| 2002–2003 | 83 | 69 | 63 |
| 2003–2004 | 83 | 72 | 61 |
| 2004–2005 | 85 | 76 | 74 |
| 2005–2006 | 75 | 70 | 74 |
| 2006–2007 | 73 | 63 | 73 |
| 2007–2008 | 88 | 56 | 92 |

SOURCE: Calculations based on data from the Directorate of Municipal Administration.

**TABLE 10.8**
Borrowing capacity of ULBs, 2007–2008 (Rs. millions)*

| Category | Revenue receipts | Revenue expenditure | Receipts minus expenditures | Net present value |
|---|---|---|---|---|
| MCGM | 89,230 | 78,441 | 10,788 | 36,739 |
| OMC | 19,288 | 10,819 | 8,468 | 28,839 |
| CO | 1,613 | 1,477 | 136 | 463 |
| Total | 110,130 | 90,738 | 19,393 | 66,040 |

*Calculated as the annuity or net present value of 50 percent of the latest revenue account balance (revenue receipts minus revenue expenditures), presumed to repay debt over 15 years, at an assumed interest rate of 12 percent.
SOURCE: Calculations based on data from the Directorate of Municipal Administration.

the state government. MCGM, the largest corporation in terms of finances, has the largest borrowing capacity among ULBs in MMR, whereas COs have very little capacity to borrow. The borrowing capacity of ULBs urgently needs to be improved by undertaking reforms that will bolster their revenues. This is especially important since the ULBs, by definition, face a hard budget constraint.[27]

To begin with, ULBs should be duly and fairly assigned revenue handles and untied resources through formulaic and hence certain devolution. The other important source is via leveraging land, which is their biggest asset, although constitutionally "land" is a state subject. This has been attempted to some extent in MMR, mostly by parastatals, such as City and Industrial Development Corporation in Navi Mumbai (Phatak 2009) and MMRDA in Bandra Kurla Complex, but ULBs have so far not been able to extract the tremendous land values to bolster their finances. The use of development charges and betterment levies (that could be imposed despite land being a state subject) could be a viable means of self-financing smaller infrastructure projects. However, the use of such measures has to be preceded by reforms in land markets and transparent information systems. Accessing capital market

[27] The municipal acts require the ULBs to balance their budgets. Further, the absence of devolution and exposure to some borrowings/debt (even after approval) still being categorized as "private" exacerbate the situation.

(municipal bonds) or taking exposure to loans from financial institutions is yet another source. This would require that the ULBs' balance sheets be cleaned, especially those of smaller ULBs, and they need to be rated so that they present an acceptable risk for the banks and other financial institutions to take on exposure. One other way is for the weaker ULBs to come together with the stronger ones to form a virtual entity. This would call for innovation and modifications in the standard pooled fund bank models. This will help take care of the inclusive developmental mandate and avoid mere cherry-picking (for details, see Pethe and Lalvani 2006).

## Other Sources of Investments in MMR

One route to resolving the financing gap for MMR local governments is an increased direct role for central government, international agencies, parastatals, and private players. This, rather than devolution, seems to have been the strategy followed in MMR.

### *Jawaharlal Nehru National Urban Renewal Mission*

Realizing the need to address the issues of haphazard urbanization, in 2005 the central government launched the largest ever nationwide scheme for urban infrastructure development, the Jawaharlal Nehru National Urban Renewal Mission (JnNURM). This scheme, in MMR, comprises approximately 13–15 percent of total public capital investments in the region. The scheme is aimed at providing funds to select cities to improve infrastructure and governance (the Submission for Urban Infrastructure and Governance) and to address problems of urban poverty (the Submission for Basic Services to the Urban Poor). Cities hoping to access funds from JnNURM for undertaking infrastructure programs had to undertake several governance reforms to becoming eligible for funds. Although it is true some of these reforms were not implemented quickly, there is no denying that pressure from the central government has forced the states to initiate the reforms listed. The infrastructure projects were to be funded (viability-gap-funding mode) in part by the center, state, and ULBs; however, the nodal agency was the nonelected developmental authority/parastatal (MMRDA). The share in total funding for MMR is 35 percent by the center, 15 percent by the government of Maharashtra, and 50 percent by the ULBs.

Only the stronger ULBs in the region, those of Mumbai and Thane, have been successful in releasing a significant proportion of their stipulated share. The performance of the government of Maharashtra in this regard has been poor. The process of financing is such that the ULBs first have to put up their share, followed by the state government. However, given the weak financial position of ULBs, they find it difficult to raise 50 percent of the project cost, and with the state government not fully releasing its share till the ULBs do so, the latter are unable to undertake the required infrastructure projects. Looking at the poor performance of MMR and other cities, the latest Ahluwalia Committee Report (2011) on Indian urban infrastructure and services recommends a new and improved JnNURM to apply the lessons learned from the experience for better outcomes.

### *International Donor Agencies*

External assistance, through funding from international donor organizations, in big-ticket projects, as well as grassroots programs, is playing a crucial role in changing the face of MMR. This assistance has primarily been from large organizations, such as the World Bank and the Japan International Cooperation Agency (*Indian Express* 2011) on a project basis.

The most prominent (in terms of size and scope) among such externally funded projects has been the Mumbai Urban Transport Project set up under the auspices of the World Bank, Mumbai's biggest and most comprehensive project of improving transport management in the region. However, there have been inefficiencies in implementation and delays in loan repayments. The involvement of multiple public organizations in the project brought to the fore problems of cooperation and interorganizational conflict, which resulted in delays and cost escalations (*Indian Express* 2010; *Times of India* 2004).[28] The World Bank decided to suspend the loans for the project (Hindu Business Line 2006), albeit temporarily (*Daily News and Analysis* 2006). MMRDA has asked the World Bank for several extensions of their loan for the project (*Times of India* 2011a).

External aid agencies have also been working on slum-related projects in the region. For instance, the Slum Sanitation Program was funded by the World Bank in order to provide better sanitation facilities to slum inhabitants. The program was unique because of its participatory focus, with mandated participation by the slum dwellers through community-based organizations (CBOs) and nongovernmental organizations (NGOs). In fact, this was the World Bank's precondition for releasing funds (Sharma and Bhide 2005). While this program envisaged the participation of several CBOs and NGOs, in reality it ended up being managed by a single NGO, which had a good international reputation as well as political connections (McFarlane 2008; Sharma and Bhide 2005). The program did not meet expectations for outcomes, including unwillingness of slum inhabitants to participate in the program, absence of multiple NGOs (McFarlane 2008; Sharma and Bhide 2005), and failure to consider the power distribution among CBOs and local leaders and the divisive forces that split communities along ethnic, caste, religion, and economic lines (McFarlane 2008; Sharma and Bhide 2005).

The cases of the Mumbai Urban Transport Project and the Slum Sanitation Program are different: the former is a massive project at the metropolitan scale involving interactions among many public organizations, whereas the latter is a smaller program implemented at the grassroots level. Apart from a need for being better prepared (by the locals) for optimal utilization of international donors, the experience of both these projects points to the need for international donor organizations to understand the institutional environment in the country or region to which they lend support. One must recognize that international aid is a problem of collective action at multiple levels and requires a careful examination and understanding of

[28] It is not just the multiplicities per se but the fact that attempts to have the transportation infrastructure plans to be unified and integrated into the overall vision/plan have met with opposition. The reasons are not technical but rather political rent-seeking space contestations.

the linkages between different actors and the incentive structures for aid to be able to fulfill its desired objectives (Gibson et al. 2005).

### *Non-ULB Public Investments*

As mentioned earlier, different departments of the government of Maharashtra, through state-owned parastatals, are seen to be making/leveraging investments in infrastructure in MMR. The magnitudes of investments made by some prominent parastatals are shown in table 10.9. A large proportion of the non-ULB public investments is routed through the MMRDA. For instance, MMRDA is responsible for the disbursements of the MMR Development Fund, the funds for the Mumbai Urban Transport Project, and the revolving funds for the Mumbai urban development projects and the Mega City Scheme. While other parastatals do not make significant capital expenditures on their own, they manage to leverage funds by various means in order to undertake large-scale infrastructure projects.

### *Leveraging the Investments via Public-Private Partnerships*

Given the state of the finances of ULBs, investment via the classical mode of budgetary support is limited. The constraints arise from limits in technical and managerial capacities. Therefore, the public-private partnership (PPP) mode is increasingly perceived to overcome these limitations to rebalance the mix of investment sources and to create a demonstrable positive impact on the overall working and functioning of urban authorities. Indeed, urban authorities inevitably will have to progressively benchmark their existing and future augmentation of infrastructure services in a cost-effective and efficient way. Given their hard budget constraints, this could be possible by encouraging private participation in infrastructure provision since private corporations may be more efficient in terms of functioning. PPPs have been talked about but not really developed, largely because there is a trust deficit between the private and public agencies. Efficient execution of some major demonstrable projects would accelerate urban infrastructure development under the PPP framework.

**TABLE 10.9**

Non-ULB public investments in MMR, 1999–2000 prices (Rs. million)

| Fiscal year | MIDC | MHADA | CIDCO | MMRDF | MUTP | MUDP-RF | MCS-RF |
|---|---|---|---|---|---|---|---|
| 2005–2006 | 300 | 2,700 | 2,340 | 3,730 | 6,580 | 60 | 1,660 |
| 2006–2007 | 960 | 3,600 | 1,230 | 4,420 | 7,930 | 150 | 1,490 |
| 2007–2008 | 890 | 2,230 | 2,760 | 3,700 | 8,850 | 350 | 450 |
| Total | 2,150 | 8,530 | 6,320 | 11,850 | 23,360 | 560 | 3,600 |

Abbreviations: CIDCO, City Industrial Development Corporation; MCS-RF, Mega City Scheme revolving fund; MHADA, Maharashtra Housing and Area Development Authority; MIDC, Maharashtra Industrial Development Corporation; MMRDF, MMR Development Fund; MUDP-RF, Mumbai urban development projects revolving fund; MUTP, Mumbai Urban Transport Project.

Source: Calculations based on data collected from MMRDA, CIDCO, MIDC, and MHADA.

In the last few years the MMRDA, the nodal development authority parastatal in MMR, has been involved in undertaking projects in the PPP mode.[29] This has largely been on a build-own-transfer basis and involves large projects related to metro corridors. Special-purpose funding vehicles have been set up, with the MMRDA involved via extending equity or debt to such special-purpose funding vehicle. The viability gaps in projects are identified, and almost all of this is funded through special assistance from the central government, with a debt:equity funding pattern of 70:30. The concessionaire period is typically around 30 years. There is also an enabling/facilitating type of PPP where no resources of the MMRDA are involved. Many more large-scale PPP projects are in the pipeline, not just by MMRDA but also by Maharashtra State Road Development Corporation and MHADA in the specific areas of road development and affordable housing.

For both international donors and PPPs, the contract is generally with the state or the central government. Except in the case of large municipal corporations, the lack of capacity to negotiate and undertake such contracts is the reason. This is being addressed through capacity building of smaller ULBs by setting up the Mumbai Urban Infrastructure Company Ltd., a special-purpose viability fund established with the help of multilateral agencies. In sum, although there is much potential in this mode of infrastructure finance, very little in concrete terms is seen in practice.

## Snapshot of Investments in MMR

Prud'homme (2007) categorizes the key investments necessary to bolster growth as investments in productive capital, housing, and infrastructure. Public investments in MMR are carried out by the ULBs, the state government through parastatals, the leveraging effort through the PPPs, and the flows from the central government through plan and centrally sponsored schemes. This section examines the share of these public organizations in the total public investments in the region from 2005–2006 to 2007–2008. ULB investment in MMR during this period was around 45 percent of total public investments. Non-ULB public investments (including JnNURM investments) during this period were approximately 55 percent of total public investment in MMR. To gain perspective, note that total public investments are only around 12 percent of the total estimated investments (infrastructure and other) taking place in MMR from all the sources (private/public/multilateral) as estimated by using growth and incremental capital output ratio figures.

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[29] There are three major ongoing PPP projects. One is the Versova-Andheri-Ghatkopar metro corridor, which is 11.77 km and has 12 elevated stations. The special-purpose vehicle funding route is being used by Mumbai Metro One Private Ltd. at a cost of Rs.23,560 million. The viability gap fund is Rs.6,500 million, of which the Indian government has granted Rs.4,370 million. Another project is the Charkop-Bandra-Mankhurd metro corridor, 31.87 km with 27 elevated stations, being implemented by Mumbai Metro Transport Private Ltd. at the cost of Rs.82,500 million, with a viability gap fund of Rs.22,980 million, of which the Indian government has sanctioned Rs.15,320 million, with the rest to be borne by MMRDA and the state government. In another project, a total of 122 bus shelters were commissioned with a right to display for 10 years and a payment of stipulated yearly premium. Yet another project involves at least three large-scale solid waste management (regional landfill) facilities, which is a pioneering attempt to apply PPP on such a large scale.

The investment requirement may be seen from the MMR draft plan, the business plan that the state government had commissioned to MMRDA and LEA International Ltd. to actualize the Vision Mumbai document (Bombay First 2003). The report by MMRDA and LEA International Ltd. (2007) recommends a four-pronged approach to create a competitive, livable, bankable, and well-governed MMR. The plan articulates the role of each of the levels of government (local, metropolitan, state, and central). It estimates infrastructure investments to be Rs.2,565,400 million from 2005 to 2021. These include investment requirements for infrastructure at national, metropolitan, and local levels and also for land, real estate, and housing, which are taken together as a separate category. For the 2005–2021 period, investments for national-level infrastructure are estimated to be of the magnitude of Rs.288,370 million, and investments in power, Rs.545,210 million. Thus, the remaining investments, which are of the order of Rs.1,731,820 million, are to be carried out by the ULBs. It is further estimated that 25 percent of these investments have to be carried out by own-source revenues and by levying development charges, and 20 percent of the investments have to be raised through borrowings by the ULBs. The remaining investment requirement, according to the MMR business plan, is to be raised through intergovernmental transfers and private participation. On an annual basis, assuming an equal burden over all the years, the investments to be raised through own-source revenues, including development charges, and borrowings are Rs.26,957.02 million and Rs.21,337.23 million, respectively. Given the present tax handles and committed revenues of the ULBs, such additional investments seem quite impossible, especially for the smaller municipal corporations and the COs within MMR. The expenditures and resources for MMR for the years 2005–2006 to 2007–2008 are shown in table 10.10. The revenue and capital expenditures in MMR are 54 percent and 46 percent, respectively. The re-

**TABLE 10.10**

MMR balance sheet: Expenditures and revenue sources (percent)*

| Item | For the years 2005–2006 to 2007–2008 |
|---|---|
| ***Expenditure*** | |
| Revenue expenditure by the ULBs | 53.97 |
| Capital expenditure by ULBs, parastatals, and centrally sponsored schemes | 46.03 |
| ***Revenue sources*** | |
| ULB own-source revenue | 68.27 |
| ULB other revenues | 2.49 |
| ULB borrowings | 3.78 |
| State | 19.38 |
| Central | 6.07 |

*Total expenditures are approximately Rs.290,000 million over the three years.

SOURCE: Calculations based on data from Department of Municipal Administration, MMRDA, CIDCO, Directorate of Economics and Statistics, Municipal Corporation of Greater Mumbai, and Maharashtra Industrial Development Corporation.

source flows are 68 percent from own-source revenues, with about 19 percent and 6 percent flowing from state and central government, respectively, and ULB borrowings at 4 percent. The total resources flowing in the region over a three-year period is Rs.290,000 million. If the ULBs are to meet the required additional investment as stated in the MMR business plan, they would have to double their existing capacity of own-source revenues and increase their borrowings severalfold.

Given the present capital investment of the government, the total public investment in the region comes to a small proportion of the total investment in the region. The residual investment of the total investment presumably comprises investment by the private sector in productive capital, as well as in infrastructure, and investment in housing and real estate sectors. The total envelope of direct investment comprises 88 percent from private sources (including multilateral agencies and international donors); of the remaining 12 percent of public investment, ULBs have a share of 45 percent and the parastatals, including JnNURM, 55 percent. This state of affairs has led to infrastructure bottlenecks in key sectors, thereby affecting livability and sustainable development in the region; the symptoms manifest as the chronic poverty, proliferation of slums, and poor-quality and inadequate basic amenities.

## Land Governance, Affordable Housing, and Slums in MMR

Given that, on most socioeconomic parameters, MMR is doing better than the rest of the state (and many other parts of the country), it naturally continues to experience tremendous in-migration. Given, further, that the real estate prices are among the highest in the world (certainly in India), it also means that the incomes that informal livelihoods yield to such migrants are insufficient to afford them formal housing. Naturally, the biggest challenge facing MMR is the conspicuous presence of slums in its cities. That MMR is home to Dharavi, arguably the largest slum settlement in Asia, along with several large pockets of slums, indicates the gravity of the problem. The proportion of slum dwellers to total population and the spatial distribution of slums for the Mumbai district is shown in table 10.11. For the regional zone maps of Mumbai, see figure 10.2a and 10.2b. Mumbai's population has doubled since 1971; every other person living in Mumbai lives in slums.[30] Annez et al. (2010) show that the increase in slum population indicates the formal housing sector's lack of absorptive capacity. An underlying reason for the proliferation of slums is the natural and artificial (that is, policy induced) scarcity of land (Bertaud 2004), and the absence of affordable housing. Faulty regulation of land markets, speculation, rising incomes, and influx of population feed into the already huge demand pressure, and all of this along with asset bubbles leads to soaring property prices, making the already terrible situation worse. It is estimated that at the pres-

[30]The 2011 census figures show that the population in Greater Mumbai is stabilizing (Pethe et al. 2012) while the other parts of the region are growing. The greatest increase in population seems to be reported within MMR from the Thane district. There appears to be a "gentrification with a voluntary twist" under way (Pethe 2010, 3). Usually, gentrification has an element of direct coercion. Here, the point is that the extant incentives are such that people take rational actions in conformity with the incentive structure that result in a gentrification like outcome. There is an apparent element of voluntary behavior and hence we term it as gentrification with a voluntary twist.

**TABLE 10.11**
Zonal population growth and proportion of slums in Mumbai city (thousands)

| Zone* | 1971 | 1981 | 1991 | 2001 | Percent population growth, 1971–2001 | Slum dwellers as percentage of total population, 2001 |
|---|---|---|---|---|---|---|
| Zone 1 | 1583.18 | 1487.34 | 1322.17 | 1377.58 | –12.99 | 12.34 |
| Zone 2 | 1487.2 | 1797.7 | 1852.74 | 1960.45 | 31.82 | 47.06 |
| Zone 3 | 1097.32 | 1632.52 | 2041.42 | 2428.91 | 121.35 | 57.00 |
| Zone 4 | 608.17 | 1225.65 | 1906.57 | 2703.42 | 344.52 | 51.35 |
| Zone 5 | 589.88 | 999.79 | 1439.51 | 1867.12 | 216.53 | 78.51 |
| Zone 6 | 604.83 | 1100.43 | 1363.52 | 1640.98 | 171.31 | 69.75 |
| Total (decadal growth rate, %) | 5970.58 | 8243.43 (38.07) | 9925.93 (20.41) | 11978.45 (20.67) | 100.62 | 54.06 |

*For definition of zones, see figure 10.2.

SOURCES: Mumbai's population from 1971 to 1991, MMRDA (2003); population and slum population for 2001, Mumbai Human Development Report (2009).

ent property prices and income distribution, 94–95 percent of the population cannot afford a house in Mumbai (Gandhi 2012). Clearly, this calls for innovative solutions, including rental housing.

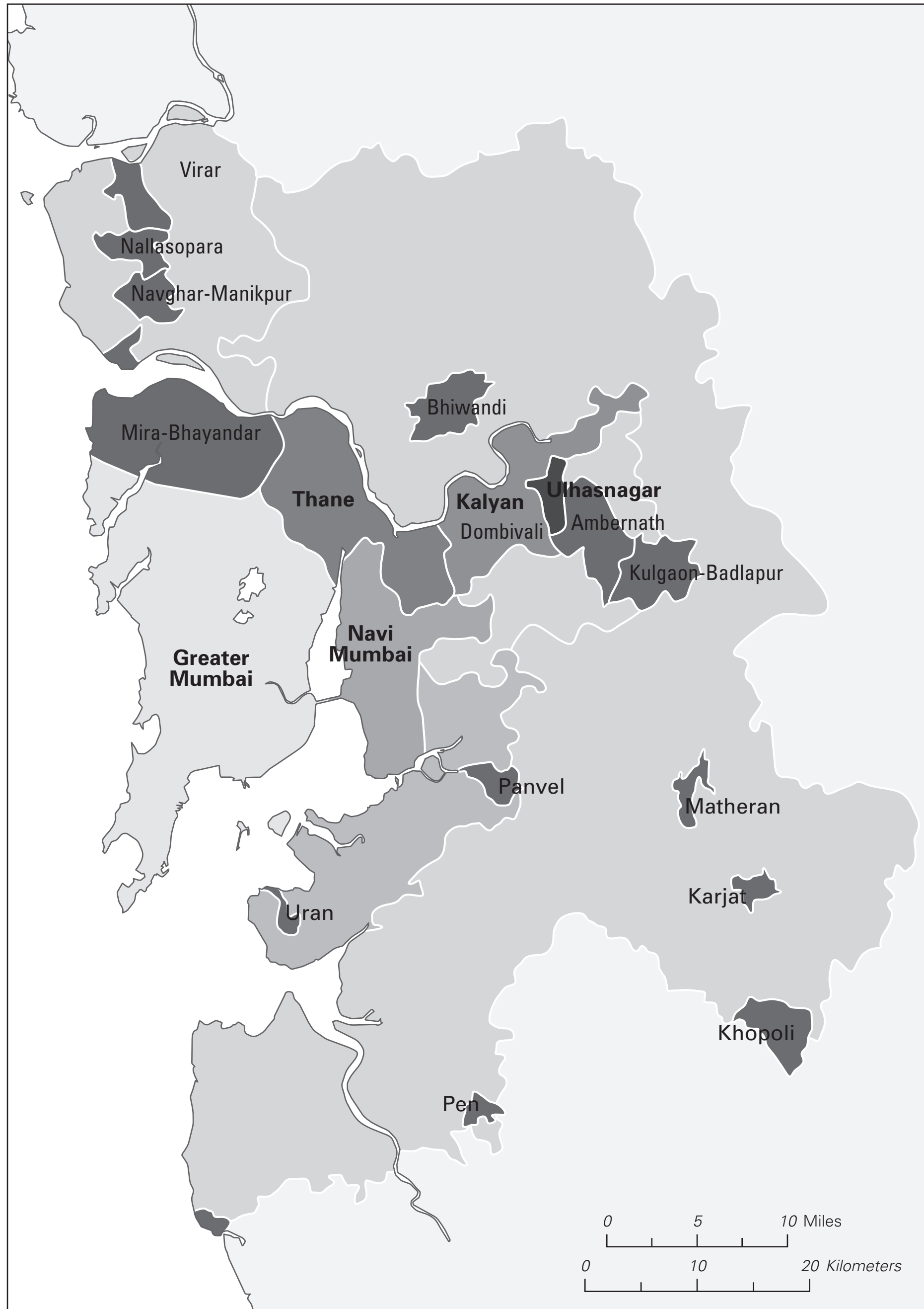
The proliferation of slums in the region brings to the fore fundamental issues of inequality, exclusion, and improper management of land and housing markets in metropolitan regions, and addressing these requires careful and deliberative policies. Over the years, several policies have been formulated but have undergone a transition reflecting the changing perceptions of the policy makers and international multilateral organizations related to slums and the role of public and private actors. The advent of privatization in India in the 1990s welcomed the involvement of private players in mitigating the problem of slums (O' Hare, Abbott, and Barke 1998). These private players are provided incentives in the form of transferable development rights by the government to participate in slum redevelopment (Nainan 2008). The use of transferable development rights has become widespread since it is the preferred mode of compensation by the government (because it is an off-budget tool) and can be sold to raise finances for projects. Thus, transferable development rights, which are essentially a planning tool, have been used as a financing tool. Apart from private actors, slum rehabilitation policies have also increasingly sought to involve NGOs and the communities living within the slums in the process of redevelopment.

The state government itself has continued to remain involved in slum redevelopment and provision of affordable housing to the poor. Apart from the MHADA, which has been providing affordable housing for decades, the government of Maharashtra assigned this role to two other parastatals: the Slum Rehabilitation Authority and the MMRDA. Both parastatals have the authority to generate and sell transferable development rights in the open market.

The plethora of policies and public and private actors involved in slum redevelopment and affordable housing provision have been unable to check the growth of

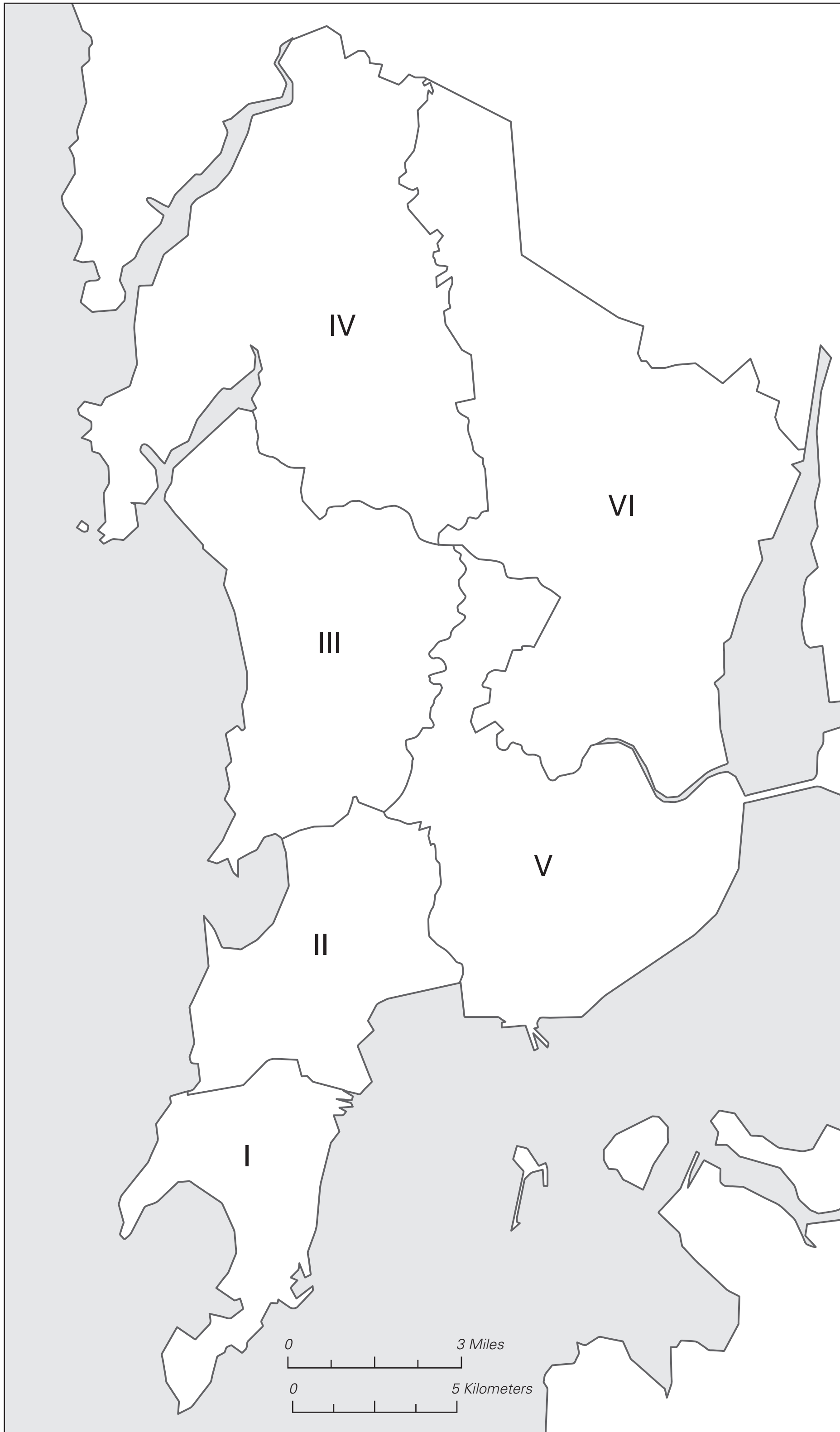
**FIGURE 10.2a**

Regional map of Mumbai




SOURCE: MMRDA (2003).

**FIGURE 10.2b**
Zonal map of Mumbai



slums. Most of the policies have been myopic, with actual outcomes that differ greatly from intended outcomes. For example, rather than affecting the housing supply market, more houses are being built but fewer people are living in them. After thoroughly confounding the situation by transferable development rights and ad hoc Floor Space Index (also known as Floor Area Ratios) with premiums (shared between state and ULBs), there seems to be some rationalization through relaxation of Floor Space Index regime recently. The most recent policy pertaining to slums is the centrally sponsored scheme Rajiv Awas Yojana, which aims to make cities in India slum-free in five years. Given the performance of slum-related policies in the past, one does not hope for much success, unless the scheme's actors learn from the past and consider the informal institutions that affect incentives of different parties arising out of distortions in land and housing markets (Gandhi 2012). For Rajiv Awas Yojana to be successful, it should recognize Freire's "eight pillars" for the success of nationwide programs for slum upgrading (see chapter 14). Indeed, this holds for problems in MMR, which must be contextualized within the governance system in the region.

## Governance Conundrum

It can be argued, especially regarding the performance of ULBs, the experience of land management, and the persistence of slums in MMR, that governance is key to ensuring that outcomes are socially efficient. Governance in MMR, being multilevel (vertical) and multiorganizational (horizontal) in nature, involves sharing of power (fiscal and functional) among the central, state, and local governments, as well as complex networks among various actors: ULBs and several task-specific state- and center-owned parastatals, not to mention the well-entrenched informal systems and actors.

The 74th CAA recognized local governments as a third tier of government, but as mentioned earlier, lack of implementation in terms of "three Fs," functions, finance, and functionaries (personnel), has led to weak local governments. In the case of MMR, this has led to severe incapacity, especially for the smaller ULBs, to undertake capital expenditures, resulting in infrastructure deficits in the region. The smaller ULBs in the region have become heavily dependent on large grants, which are devolved in an ad hoc manner, impeding the planning process of ULBs. The state and the center further impede the autonomy of the local bodies by carrying out enormous capital expenditures in MMR via their task-specific parastatals.

At the metropolitan level, the existence of fragmented local governments, along with multiple parastatals having overlapping jurisdictions, gives the governance system the appearance of a "polycentric governance system" endorsed by such scholars as McGinnis (1999a; 1999b; 2000), Ostrom (2010), and Ostrom, Tiebout, and Warren (1961). However, the governance system in MMR, although ostensibly polycentric, is far from being efficient (Pethe, Gandhi, and Tandel 2011). Barring MCGM and some municipal corporations, all other ULBs are too weak to perform even the basic functions expected of them, let alone engage in competition with one another or with the parastatals to provide public goods and services. Pethe, Gandhi, and Tandel (2011), in examining the case of MCGM and MMRDA, show

that their relationship is characterized not by cooperation or competition but, rather, by destructive conflict and a power imbalance that favors the latter. For instance, the MMRDA does not pay property taxes that accrue to MCGM (*Indian Express* 1998). The vertical federal system affects the horizontal efficiency of the metropolitan system. These inefficiencies in the system have resulted in an increasing involvement of the civil society, which comes with its own set of issues (see Anjaria 2009; Zerah 2009).

The MPC is supposed to improve coordination and bring about cooperation among the various public bodies at the metropolitan level. However, having an empowered metropolitan-level body comprising elected members from the local governments may lead to inter-organizational conflicts. This seems to be the case for MMR, where the MPC has not been empowered because it would undermine the powers of both the state and the local governments. Thus, the absence of a system of institutions that ensures effective decentralization, process transparency (hence accountability), incentive compatibility, and citizen participation in the decision-making process renders the governance system in MMR inefficient and impedes potential growth and service delivery.

## Conclusion

This chapter, by focusing on the situation in MMR, highlights the complexities that governments and policy makers in developing countries face in managing metropolitan regions. These regions require large investments in basic infrastructure if they are to attain sustainable growth rates. The analysis considered the political reality (fractured state within the federal set up), the state of decentralization or ineffective "home rule," and the conformity of policies with the "goodness of law" and incentive compatibility.

Although the situation in MMR is better than for other nonmetro ULBs in India, which suffer from chronic financial weakness, there is room for improvement even in the Mumbai region. Looking at the levels of spending on core public goods, it may be inferred that, for MMR as a whole, not enough is being spent on core public services. The reason for such low spending on public goods and services, especially by the small ULBs in MMR, can be attributed primarily to their weak financial position. Absence of buoyant revenue handles, excessive reliance on grants from the center and state governments, and inability to autonomously access capital markets have weakened their ability to fulfill their mandated functions.

This chapter indicates that public investments in the region originate from three important sources: ULBs, state government (via parastatals), and central government (via centrally sponsored schemes, e.g., JnNURM). However, capital expenditures of ULBs are rather low and far below those required to efficiently fulfill their mandated functions. Revenue handles with the ULBs are limited, and tax collections do not meet their potential. There is a need to reform the property tax system, which is the most important revenue handle with the ULBs, in order to bolster own-source revenues. The collections of user fees and charges are also low, pointing to a need for rationalization. There is tremendous dependence, especially by the weaker

ULBs, on grants received from the state and central government. These grants have been ad hoc in nature and are usually devolved with considerable delays. The weak fiscal situation of ULBs hampers their capacity to borrow funds from the capital markets.

While the performance of ULBs has been unsatisfactory, infrastructure investments in the region by centrally sponsored schemes, international donor agencies, parastatals, and private players (through PPPs) have been on the rise. Yet despite investment flows from the state and the center, the cumulative public investment in the region is not adequate to meet the backlog of investment and future demand in infrastructure. Hence, the higher-level governments do not recognize the full potential of rich dividends in the form of tax revenues that would accrue if they were to invest more in MMR. Poor land management policies are one of the most important reasons for manifestation of slums. Efficient land management will not only help mitigate the issue of slums but also be instrumental in improving the performance of the ULBs, which will help unlock tremendous land values to boost their revenues. Ultimately, it is clear that reform in governance systems is the key to ensuring better outcomes in terms of efficient delivery of public goods and services.

One of the chief stumbling blocks has to do with the huge data gaps, in both financial and physical terms (indeed, the latter makes it impossible to bring in a best practice like an outcome-based performance appraisal). The need to strengthen de facto decentralization in a meaningful sense is evident. At a more macro level, there is an urgent need to clarify jurisdiction of various authorities in both the horizontal and vertical sense, to creatively manage polycentricity.

Thus, during the 1990s and 2000s, there seems a long-awaited recognition that India's future is essentially urban. Despite de jure constitutional amendments, the reality vis-à-vis the management of the metros and city regions has not changed much. ULB investment and governmental structures in terms of revenues and expenditures, although clearly increased in absolute terms, has remained proportionately more or less the same since decentralization 20 years ago. This complex governance conundrum requires constant engagement and vigilance, as well as positive intent, angelic patience, and mature modesty toward realistic expectations.

This is a story of a metropolitan system that contributes hugely to the state, as well as to the nation as a whole. This "goose that lays the golden egg" is in need of serious attention. The issue is not really a conceptual matter as much as one of political will regarding implementation of uncluttered and sharply defined empowered subsystems that work cohesively. Thus, effective decentralization, attractive investment climate, and coordination among multiple agencies would help transform the MMR region into a people-friendly urban space.

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