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Delivering and Financing Public Services in Metropolitan Areas

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Handbook of Multilevel Finance

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13. Delivering and financing public services in metropolitan areas*

Roy W. Bahl and Johannes F. Linn

1. INTRODUCTION

The inadequate level of public services in the metropolitan areas of developing countries, and the prospects of continued high level of growth of city populations over the next three decades will almost certainly cause national leaders to revisit their urban strategy. The goal in this chapter is to support such efforts by reviewing the state of metropolitan governance and finance in developing countries, suggesting the lessons that might be learned from theory and from the international experience, and considering the policy reform choices that are open. There is a rich body of research literature on the subject of urban governance and finance in the industrial countries.¹ But in developing countries, where the problems and reform options are fundamentally different, there is much less research, relatively little information that can be used to assess the success of policy, and almost no comparative data.²

We focus in this chapter specifically on the opportunities and challenges of metropolitan governments. We do so because the large cities around the developing world are where in the foreseeable future a large share of economic growth and its sources – innovation, competitiveness, skills, entrepreneurship, integration into global productive and knowledge networks and so on – will be located. Moreover, the special issues faced by metropolitan areas in developing countries are, if anything, even more neglected than the general urban management and finance issues. However, much of our analysis and many of our conclusions also apply to the more general challenges of urban service provision and finance in developing countries.

In the next section of this chapter, we summarize the evidence about the magnitude of the public servicing problems facing large urban governments. We then turn to the models of governance that are used to deliver assigned services within metropolitan areas and to the efficiency–equity trade-offs involved. In sections 4 and 5, the most commonly used financing models are described and evaluated. Section 6 concludes and suggests a general policy direction.

2. SERVICE DELIVERY CHALLENGES

Service delivery challenges will come from several directions: migration to cities that will further strain the already weak level of services provided, deficient infrastructure, and service expansions to reduce disparities between higher and lower income neighborhoods. For sure there are similarities with the problems facing metros in industrial countries, that is, migration from abroad, intra-metropolitan disparities in the quality of

services provided, and the need to address the problems that come with congestion. But the backlog of unmet demands is nowhere near as great as in developing countries, the rural–urban migration has mostly played out, and the resources to address these problems are much greater.

Population Growth, Migration and Public Services

By the middle of the twenty-first century, the number of people living in urban areas will have risen by about 2 billion (United Nations, 2008). The number of megacities (population greater than 10 million) is projected to increase from 19 now to 27 in 2025, when about 10 percent of the world's urban population will reside in these cities. Of the projected 27 mega-cities, 21 will be in developing countries. By 2025, there will be 48 cities with populations between 5 and 10 million, and three-quarters of these will be in developing countries.

Not only will there be more people to serve, but settlement patterns will lead to more congestion in the inner cities and urban sprawl in the suburbs and this will bring new expenditure demands. More metropolitan cities will be clustered in multi-metro-regions/corridors. Planning for the entire metropolitan region will be an imperative. Rising mobility with greatly expanded car ownership will result in declining urban densities and will create challenges for infrastructure, environment and agricultural land use. Metropolitan area governments also will need to be at the forefront of the response to climate change challenges and green growth opportunities (Bahl et al., 2013).

The job of accommodating the demand for services brought by this population growth and changing urban structure will be complicated by the need to catch up on existing backlogs. Services in many metropolitan areas are now delivered at levels well below the standards that governments have identified as minimal. Precise estimates of the annual cost of providing a reasonable amount of services in this new urban setting are difficult. Minimum levels for public services vary from country to country, as do costs and the capacity to deliver. But almost everyone agrees that the price tag will be high.

Infrastructure Needs

The infrastructure stock is badly deficient in urban areas in most developing countries. Projections have been made with deterministic models based on the average cost of providing a standard level of services. The results are staggering. An extrapolation of estimates by the Asian Development Bank of urban infrastructure funding requirements for Asia results in an estimate of investment needs of about \$120 billion per year (Kharas and Linn, 2013). Ingram et al. (2013) estimate that annual urban infrastructure costs will be equivalent to about 3 percent of GDP for new infrastructure and 2 percent for maintenance. Individual country studies have likewise identified a large gap. The estimates are that for India to meet projected needs, urban infrastructure investments (excluding maintenance expenditures) must increase from current levels of 0.7 percent of GDP to 1.1 percent by 2032 (High Powered Expert Committee, 2011).

Public infrastructure to support industrial and commercial activity is another demand to be addressed. Most developing countries have come to realize that an internationally competitive economic structure requires a higher quality infrastructure than is presently

in place. Students of urban economic development, such as Glaeser and Gottlieb (2009) and Yusuf (2013), identify the key factors that can drive strong and sustainable metropolitan income and employment growth as an economic base that is competitive in domestic and global markets, strong IT and transportation linkages, a concentration of human capital skills, and quality governance that supports metropolitan growth and captures the opportunities that urban growth spins off.

This is not to say that there is no overlap between the infrastructure needs of businesses and those of families. Surely a more livable city with better schools and a better transportation network will attract the kind of human capital that businesses need. But, at the margin, businesses may have different preferences for public investment, for example, better highways, airports or universities vs. basic health care facilities, slum clearance or low-income housing.

Disparities and Slums

Slums present severe problems of human welfare, and they put the growth of the urban economy at risk. The wide disparity in the quality of housing and in access to public services, and the visibility of these differences, has the potential to generate social unrest. Slums may breed security problems and pollution and health problems may spillover to other neighborhoods. These spillovers and the aesthetics of highly visible 'underclass' neighborhoods reduce the attractiveness of the city in general, and specifically the ability to attract both more foreign investment and human capital. Finally, the population living in slums represents a pool of underdeveloped and underemployed labor and entrepreneurial resources that could contribute tremendously to economic growth if provided better access to infrastructure and social services and decent housing.

About one billion people lived in slums in the cities of developing countries in the mid-2000s, and this number is expected to double by 2030 (United Nations, 2008). The largest concentrations of slums are then expected to be in Africa and South Asia (Freire, 2013). The concentration of urban population in slums is very large in some metropolitan areas – for example over one half of the population in Mumbai (Pethe, 2013) – and migration in the next two decades will almost certainly swell this number.

The right policy instruments to use in addressing the problem in slums depends on how one views the problem (Linn, 2010). One view is that slums are largely an inevitable and transitory by-product of urbanization in poor countries, which sustained economic growth, made possible by effective macroeconomic and national spatial policies, will eventually cure (World Bank, 2009). An alternative view, and one which we subscribe to, is that the basic problem is 'shelter poverty', in which case the two biggest fiscal issues to be addressed are the provision of affordable housing, and the provision of improved access to services in slum neighborhoods.³ The key services to be addressed are water, sanitation, transport, education and health. The total amount of investment required to meet the existing backlog is huge: one estimate puts the total cost at \$900 billion over 15 years (Freire, 2013). This would require a six-fold increase over what is currently being spent. And while it is unlikely that even maximum effort would produce this result, effective urban management and fiscal policy should and can aim to significantly reduce the gap, and hence the blight of slums. The remainder of this chapter explores what are the necessary ingredients of such an approach.

3. GOVERNANCE AND MANAGEMENT MODELS

There is both a vertical and a horizontal dimension to the governance arrangement in metropolitan areas. The vertical dimension is about the division of responsibility for service delivery between the local governments in the urban area, and the higher level (state and federal) governments. The horizontal dimension is about the arrangement of responsibility among local governments within the metropolitan area.

Theory

The so-called decentralization theorem tells us that expenditure assignment should be at the lowest level of government unless efficiency considerations dictate otherwise (Oates, 1972). With respect to responsibility for the provision of public services within metropolitan areas, the assignment will be driven by the presence of economies of scale, externalities in service delivery, and the strength of preferences for local control. When the question is narrowed to the horizontal arrangements, the operational question is this: 'Of the responsibilities assigned to subnational governments, what will be the division of expenditure responsibilities among lower level municipal governments, single function special districts, and area-wide metropolitan governments?'⁴ The decentralization theorem can provide just as much guidance to metropolitan governance as to national governance in offering a way of sorting out expenditure responsibilities based on efficiency considerations. And, as in the case of national decentralization, it is just as limited in leaving open the questions of equity, politics and history.

The answer we get from the theory about the optimal degree of fiscal decentralization in metropolitan areas, however, may be different from that for national fiscal decentralization. Spillover effects will be greater within than among metropolitan areas, and many of the economy of scale efficiencies can be captured at the metropolitan area level, suggesting a more centralized structure. Concerns about equity, in the form of fiscal disparities, are also likely to give more of a centralizing push to metropolitan governance. The case for more decentralization will lie with the greater participation of voters in the fiscal decisions of the small municipalities in the urban area.

Vertical Governance

All levels of government will be involved in service delivery in metropolitan areas. Central (or state) governments can shape the distribution of services within a metropolitan area in two ways. The first is with 'vertical programs', that is, public services in the metropolitan area that are directly provided by the central or state government. Expenditures made by higher level governments in urban areas is not a statistic that most countries keep, but the fact that more than 80 percent of all government expenditure in developing countries is made by higher level governments is suggestive of the size of vertical programs. In some countries, the vertical interventions by higher level governments have been led by public companies, for example, in Mumbai, most infrastructure-related services are delivered by state-owned parastatals.

Where service benefits or costs spill over metropolitan area boundaries, and where there are targeted goals for equity and economic development, involvement by a higher

level government to shape spending patterns can be efficient. But there also can be costs. The major issues are problems of coordination between higher and lower level governments in the delivery of shared services, and compromises to home rule. Sector ministries of higher level governments deliver services within the urban area, and often take little account of local government priorities and practices. The situation becomes difficult in cases such as Manila, where a sizeable share of the central government budget is allocated to providing services within the metropolitan area (Manasan, 2009). The general approach to resolving conflicts between levels of government is some sort of intergovernmental arrangement where the various levels negotiate to resolve the issues, but this is not always successful (OECD, 2008, pp. 236–7).

Higher level governments also get involved in metropolitan area service delivery by imposing unfunded expenditure mandates and by making conditional grants that limit the budget choices of local governments. A particularly difficult unfunded mandate to comply with is the setting of local public employee compensation by a wage commission of a higher level government, as is done (implicitly) in India. Conditional grants to local government can also limit home rule by overriding local preferences with earmarks for specific purposes, as is done for example in Colombia (Bird, 2012).

Horizontal Structures

Some functions carry metropolitan area-wide benefits and are ‘too big’ to be independently delivered and financed by lower level municipal governments. Intra-urban bus service, flood control, police protection and water supply are just a few examples of such services. On the other hand, many services carry benefits that are too localized to be efficiently delivered without involvement by local government below the metropolitan level. These might include local health clinics, primary education and road and street maintenance. Because so many functions carry both strong local benefits and important external effects, the choices on expenditure assignment are not clear cut. In most cases, governments have tried to solve this problem by striking some balance between capturing the efficiencies of area-wide government and maintaining local control.⁵ Metropolitan governance differs from place to place primarily because of the emphasis placed on capturing technical vs. economic efficiency.

Jurisdictional fragmentation

Under this approach, many general-purpose local governments operate in the same metropolitan area with elected councils and with some degree of independence in choosing their expenditure budget allocations and their tax, user charge, and capital financing arrangements. The advantage of the jurisdictional fragmentation model is that it keeps government close to the people and enhances the accountability of local officials to the voters. But the welfare gains from this ‘home rule’ model will come at some cost: failure to capture economies of scale and operating within a set of boundaries that are arguably too small to internalize important external effects or to allow coordinated service delivery. This plus the duplication of services and bureaucracy that comes with fragmentation suggests a higher cost of delivering the same quality of services. But there is not enough hard evidence about this to lead to a consensus that jurisdictional fragmentation is more costly than other forms of metropolitan governance.

Jurisdictional fragmentation can lead to large fiscal disparities among local governments in the metropolitan area because there almost always will be different financing and service delivery capacity. Klink (2008, pp. 126–7) points out significant disparities between richer municipalities in the core vs. those on the outskirts of Buenos Aires and São Paulo. A striking example of how extreme the fiscal disparities within metropolitan areas can get is the case of Abidjan, where the average per capita expenditure of the three wealthiest of the 10 communes was 49 times the average for the 3 poorest communes (Stren, 2007, p. 67). There are significant fiscal disparities between the Federal District of Mexico and the other state and local governments operating within the Mexico City metropolitan area (OECD, 2004). Per capita spending in the federal district is 75 percent higher than that in Hidalgo State and 42 percent higher than that in Mexico State (Revilla, 2012). The reasons for this disparity are the higher level of economic development and the significantly greater taxing capacity in the Federal District. Since there is no metropolitan government, fiscal equalization is left to the federal and state governments.

Jurisdictionally fragmented metropolitan governance structures have been altered in several ways to address these potential problems. One way is to create an additional metropolitan area-wide state and local government, that is, a higher tier government that is responsible for services that are best provided on an area-wide basis, and for coordination and planning. A variant of this approach is to overlay the municipal governments with single-purpose districts that operate on an area-wide basis. This is the approach that has been taken, for example, in the metropolitan New York region. Yet another approach is to try and resolve the coordination problem in service delivery with various forms of inter-local cooperation, as has been done in Vancouver.

The jurisdictional fragmentation model best characterizes governance in most US metropolitan areas, and in parts of Europe (Bahl, 2010; Lotz, 2006). For example, the Copenhagen metropolitan region is governed by 45 municipalities, the Paris urban agglomeration by 80 municipalities, 3 departments and numerous companies that provide public services, and Stockholm by 65 municipalities and five counties.

Jurisdictional fragmentation is also the prevailing model in metropolitan areas in many developing countries. The core provision of many local services in Manila is the responsibility of 11 cities and 6 municipalities whose boundaries are contained within the metropolitan area. Each has a local council that is popularly elected, and a defined set of expenditure responsibilities and revenue entitlements. Governance in the Mexico City metropolitan zone involves a Federal District and its 16 municipal-like sub-units, the States of Mexico and Hidalgo with their 59 municipalities, and the federal government. There is little coordination among these subnational governments. The Kolkata Metropolitan area, with about 15 million people, is governed by 3 municipal corporations (including Kolkata), 38 municipalities and 24 rural local governments. The São Paulo metropolitan region, with a population of about 18 million, is made up of 39 municipal governments with no overlapping metropolitan government.

Functional fragmentation

A second approach to metropolitan governance emphasizes functional fragmentation. Under this model, the delivery of a single function or a particular set of functions is placed under the control of either a public company, or a special district government. The goal is to improve technical efficiency in the delivery of the services and sometimes

to set up a special financing regime. In fact, some degree of functional fragmentation exists in almost all metropolitan areas, but the way in which this is done varies widely.

A main advantage of functional fragmentation is that the autonomous agency for a special metropolitan service district is likely to be more technically efficient because it is specialized. The staffing rules and salary schedule may be outside the normal civil service and hence the agency may be able to attract and retain higher quality workers. It also may be more efficient in its operations because it has a large enough area of coverage to capture economies of scale. Because it is usually the only entity in the urban area responsible for the function, the problems of coordination for that function are less than under a jurisdictionally fragmented model. Finally, a public company may have access to a dedicated revenue stream (e.g. an earmarked tax, a compulsory transfer from the city government, or user charges) and if well-run, it has arguably a greater potential for debt finance than a general-purpose local government.

The major problem with the functional fragmentation model is the potential loss in home rule. A totally autonomous, appointed public company would at best be indirectly accountable to taxpayers. A second concern is that the autonomous agencies may be single purpose and therefore unable to contribute to coordination of service delivery across functions. Though there are some exceptions, most special districts are single purpose. Finally, the special district may not have strong implementation powers, that is, it may not have the power to impose its service delivery or regulatory decisions on the underlying local governments.

Special-purpose districts are widely used in industrial countries. In some cases they are responsible for a number of functions (Vancouver and Paris) but in most cases they are single function as in the case of Madrid, Lausanne, New York and the Randstad region in the Netherlands.⁶ One might expect more emphasis on technical efficiency in the metropolitan areas in transition countries, because there is no longstanding tradition of local government autonomy. It is not uncommon to find city ownership of public service companies (Riga and Zagreb) and sometimes the budgets of the public service companies and the city are linked (Sofia).

Special-purpose agencies also are important in managing and financing public service delivery in the metropolitan areas of low-income countries. Sometimes this is because the special district status gets the service delivery function separated from the politics at the local level, sometimes because it makes management easier and arguably more professional, and sometimes because it is an easier route to dedicated revenue stream and debt finance. Probably the most important reason is that separation from the general-purpose local governments enhances the possibility for full cost recovery in providing the service. Whether there is merit to these justifications or not, there is great interest in using special districts to deliver services in low-income countries.

Public companies in lower income countries may be set up by the local governments, as is the case of public transportation in Bogota, Colombia. They also can be multi-function, as for the water, energy and telecommunications company in Medellin, Colombia. In some cases, the special-purpose agencies can become the dominant player in local government finance. Webster (2000, p. 7) points out that over 65 percent of urban infrastructure expenditure in metropolitan Bangkok is made by state enterprises, as compared with approximately 25 percent by the national government and less than 10 percent by the city government.

Metropolitan government

Another general approach is metropolitan government. Under this model, general services are provided by an area-wide metropolitan government, and much of the financing passes through this area-wide government. The metropolitan government may be appointed or elected, and has significant powers to regulate the service delivery and financing in the metropolitan area. In practice, few area-wide governments in large urban areas have this range of powers. More often, they have limited responsibilities, and govern alongside lower tiers of government.

There are significant advantages to metropolitan governance, most notably a built-in coordination in the delivery of all functions. This gives a potential for better resource allocation by comparison with the case where responsibility for local services is divided among multiple municipalities and special-purpose governments. The metropolitan government form also offers a greater *potential* for equalization because the quality of local services is not tied to the wealth of each local jurisdiction as it is in the case of jurisdictional fragmentation. Before 1994, the Cape Town local government was composed of 61 entities: 19 white local authorities, 6 white rural councils, 29 colored management committees, and 7 black local authorities. By 2000, this fragmented system – which had delivered a highly unequal level of services – was replaced by a single metropolitan government. The new unicity government produced a rationalization plan in order to create uniform standards of services across the new metropolitan region (OECD, 2008), and invested capital to extend water distribution, electrification and sanitation to disadvantaged areas. However, the progress in reducing the significant fiscal and service level disparities was slow (Jaglin, 2004).

Metropolitan governments often have a large enough area of coverage to capture economies of scale and to internalize externalities. This could result in both lower costs of service delivery and efficiency gains. On the other hand, there is good reason to think that at least the initial switch to an area-wide approach to governance will lead to an increase in expenditures, because metropolitan government may lead to an equalization of service levels within the region, probably at a level near the best that was provided prior to the consolidation. It is not clear that the reduction in duplicated efforts due to consolidation will offset this leveling-up effect. Finally, because capital and labor are less mobile across than within metropolitan areas, there are more choices for efficient taxation. There also may be significant tax administration economies in an area-wide approach to raising revenues.

The most important drawback of metropolitan governance is that it diminishes the power of local voters to influence the local budget. In effect, the election of the local municipal council is replaced by election of local representatives to the more distant metropolitan council. In the case of Toronto's one-tier metropolitan government, the lower tier municipality budgets simply disappeared with the consolidation, and voters from smaller municipalities were right in feeling that they had less voice. Slack (2000, p. 16) reports that for one municipality in what is now metropolitan Toronto, the elected representation changed from 7300 people per councilor in the pre-reform period to 54214 in the post-reform period. The corresponding numbers for the city of Toronto were 41850 to 54214. A second problem is that metropolitan governance can bring intergovernmental conflict when lower tier local governments resist the leadership (and especially the dominance) of the metropolitan government. Finally, the boundaries of

the metropolitan government may not be drawn large enough to fully capture the benefits of area-wide governance.

There has been virtually no movement toward metropolitan government in the US for the past half-century. In other industrial countries, there is a different experience. Toronto comes close to being a true metropolitan government. The Community of Madrid, which is seen by some as being about the same size as the functional urban region of Madrid, the Tokyo metropolitan government, and the Greater London Authority are examples. As Lefèvre (2008, p. 146) notes: 'By US standards, metro is an innovative metropolitan arrangement; yet by European standards, it is critiqued as a weak metropolitan governance arrangement with limited responsibilities and resources.'

Arguably, the formation of metropolitan government has been easier in many developing countries. Sometimes, area-wide governments were in place and their boundaries simply grew with their populations, while in other cases they came into being to meet specific needs such as the weak level of infrastructure in place, the strains placed on city finances by migration, and fiscal disparities. In many cases, democratically elected local government is relatively new, and home rule traditions are much less entrenched.

In South Africa, six single-tier metropolitan governments were created, with equalization of service levels as a primary goal. In some cases, action by a national commission was required to restate administrative boundaries so that they would match the economic region. A somewhat different model was adopted in Manila, where the Metropolitan Manila Development Authority (MMDA) exists to manage area-wide functions while the local government units are responsible for local functions. The local government units (cities and municipalities) are governed by elected councils, while the Chair of the MMDA is appointed by the President and its membership is prescribed by law. The formation of the MMDA (and its predecessor bodies) was a result of the concern for delivery of area-wide services and the perception of government that the well-being of Metropolitan Manila is a national priority. The history of metropolitan governance in Manila has been one of a struggle for power between the metropolitan government and the lower level local governments.

4. FINANCING⁷

The taxable capacity in metropolitan areas is almost always stronger than that in the rest of the country. A good argument can therefore be made that giving increased taxing powers to subnational governments in metropolitan areas would both increase total revenue mobilization and allow local expenditure needs to be better addressed. At the same time, horizontal equity issues would need to be addressed, for example, by supporting smaller towns and poorer jurisdictions with equalizing grants from the national government.

Tax Assignment Theory

Three principles guide efficient tax assignment in metropolitan areas.⁸ The first is accountability. In order to make elected local government officials more accountable to their voting constituents, it is necessary to give these officials some independent taxing

powers. In this case, 'independent' might be taken to mean at least the ability of elected local councils to set the tax rate. Non-elected governments, for example, special districts, would be limited to user charges and taxes enabled by a referendum. Following the accountability rule would be consistent with a policy strategy that would make local governments in large metropolitan areas finance their expenditure budgets with own source revenues.

A second principle is that revenue assignment should depend on the expenditure responsibility that is assigned. Under-assignment of revenue-raising powers relative to the expenditures to be financed would leave the local governments in a position of greater dependency on central/state transfers, and would make elected local politicians less accountable to local voters. As a corollary to this principle, the types of revenue-raising power assigned to local governments should depend on the expenditure functions assigned to those governments. For example, public utilities and other services that can be priced might be financed primarily by user charges, general services by general taxes, and services with spillover benefits by a combination of taxes and intergovernmental transfers (Bahl and Linn, 1983).

The third principle is 'correspondence', that is, local governments should not levy taxes whose burden can be exported to those who do not benefit from services delivered by the local government (McLure, 1998). This suggests that lower tier local governments should rely only on benefit taxes⁹ and on taxes on immobile factors (especially land), and impose an especially tight restriction on local governments in jurisdictionally fragmented metropolitan areas.

These principles suggest that metropolitan governments and area-wide special districts can be given access to some broader based taxes because productive factors are less likely to cross jurisdictional boundaries. Metropolitan area-wide governments also have some inherent advantages in tax administration: their larger geographic boundary, economies of scale associated with a metropolitan tax office, and the possibility that the prestige of a metropolitan posting will draw a higher caliber civil servant. The revenue assignments for general-purpose metropolitan governments and possibly for special districts with elected boards could include property and land taxes, property transfer taxes and betterment levies. Residence-based income or payroll taxes and destination-based sales taxes are suitable levies if the boundaries of the metropolitan area are broad enough so that there is minimal cross-border commuting. Motor vehicle license charges and even motor fuel taxes are possible in many urban areas. Finally, user and benefit charges should play a significant role in the revenue structure.

For municipalities in a fragmented structure of metropolitan governance the choices are more limited. The best candidates are taxes on property and land, user charges for services provided, and various forms of license taxes on local businesses. The problem comes when broader based taxes, such as residence-based income taxes or sales taxes are assigned to bottom-tier local governments. In such cases, commuting across jurisdiction lines to shop or to work would raise the problem of residents who receive benefits in one jurisdiction but pay taxes in another. There also are questions about the ability of smaller local governments to efficiently administer some of these taxes and charges.

For area-wide autonomous agencies, the obvious and best choice is a user charge, especially for a single-purpose authority. However, when there is a significant externality involved – transportation or solid waste disposal are examples – area-wide, earmarked

taxes are also feasible and can be structured to pass the economic efficiency test. If national priorities are involved in the service delivery, (conditional) intergovernmental transfers are justified. In some cases, autonomous agencies are indirectly financed by local taxes, through compulsory contributions by municipalities to a publically-owned company. This is not an uncommon practice in European cities.

The Practice

Locally raised revenues are not heavily used to finance public services in the metropolitan areas of developing countries. There are some exceptions, notably in Latin America, but in most cases the primary sources are intergovernmental transfers and direct financing by higher level governments. This leaves local officials only partially accountable for the expenditure decisions they make.

Subnational governments in developing countries (including provinces) are estimated to account for only about 10 percent of total revenues raised.¹⁰ An international comparison of third tier (local) government finance cannot be made from available data. Three reasons might be suggested for the limited use of local government taxation in developing countries (Bahl and Bird, 2008). First, in most cases, expenditure regimes are centralized, and so there is less demand for own source revenues. Second, local tax administrations are often thought to be less efficient than central tax administrations, and this justifies a heavier use of intergovernmental transfers to finance subnational government services. Finally, the revenue sources available to subnational governments are often restricted by country tradition or in some cases by the constitution.

Property taxes

The revenue potential of the property tax in metropolitan areas is considerable if its base is properly valued and not eroded by preferential treatments. There can be a rough correspondence between the burden distribution and the benefits received from services financed by the tax.¹¹ With effort and commitment, effective administration is possible, and the distribution of the tax burden can be progressive. So what's not to like? In fact, it is no easy matter to realize the good impacts of property taxation, even in metropolitan areas where property values are high and where administrative skills are often quite good. A well-administered property tax is expensive because tax officials must be up to the tasks of identifying the tax base, valuation, maintaining a modern recordkeeping system and collecting the tax at a high rate.

Three reasons seem to have blocked more intensive use of the property tax. The first is the political pushback to levying what is generally seen as an unpopular tax. This unpopularity is due to its base being determined in a judgmental way by an assessor, it is a tax on accrued rather than realized income, and it is highly visible. This unpopularity is heightened by the discretionary actions of local government that causes it to be viewed as an unfair tax. The second reason is institutional. If governance in the metropolitan area is fragmented, effective rate differentials will be discouraged by the threat of migration of economic activity within the metropolitan area and the revenue productivity of the tax will be discouraged under a regime where the tax is levied by the municipal governments.

A third reason has to do with history and culture. This is certainly the case in industrial countries. While the property tax has long been a mainstay in the US and Canada, it is

a minor revenue source in the Netherlands, and there is no local property tax in Sweden or Norway (OECD, 2006). Nor is the property tax a major revenue source in eastern European metropolitan areas. Governments (and voters) in most developing countries have not bought into the idea that the property tax is a good fit for financing services provided in metropolitan areas, even in countries with large metropolitan areas (Mathur et al., 2009; De Cesare, 2010). Moreover, delays in general revaluation are commonplace, significantly lowering the revenue-income elasticity of the property tax.¹²

The average revenue yield from the property tax in OECD countries is more than 2 percent of GDP, but in developing countries it is equivalent to only about 0.6 percent of GDP. In part, this is because fiscal decentralization has not been so embraced in developing as in industrialized countries. Bahl and Martinez-Vazquez (2008) have shown a significant positive relationship between both expenditure decentralization and the level of per capita GDP, and the level of the effective property tax rate. Lower income countries are less decentralized and therefore use the property tax less. There is a paucity of data available to compare the revenue performance of the property tax in individual metropolitan cities in developing countries.¹³

Reviews of the actual practice in a few metropolitan areas give some indication of the varied constraints to better practice. A successful experience is in Cape Town, where about 20 percent of metropolitan government revenues are derived from a tax levied against the capital value of land and improvements. This reflects the generally high level of property tax revenues in all of South Africa.

The primary source of revenue for municipalities in the Mexico City metropolitan area is the property tax. However, the tax is structured in such a way that a perverse incentive to tax effort is provided. The state governments are responsible for setting the tax rates and approving the tax base for each local government but receive none of the revenue, hence they have little incentive to push for a more productive property tax. By contrast, the Federal District in Mexico City which has both state and city status, is empowered to both choose the tax rate and define the tax base. While there is considerable variation across Mexico's municipalities, the average effective rate of property tax collections is even lower than the international average for less developed countries.

The dominant source of local government revenue in Istanbul is the property tax, but collections are very low by international standards. Local governments do not have the power to set the tax rate, other than within very strict limits set by the central government. The method of valuation of property also is prescribed by the central government. Hence, there is relatively little autonomy for the metropolitan local government to determine its revenue level.

The property tax in metropolitan cities in India yields less than the international average for developing countries. A major problem is administration of the tax. For example, in Mumbai only about 70 percent of properties pay tax, and in Kolkata properties are assessed at about 20 percent of their value (Mathur et al., 2009).

Income and payroll taxes

In theory, a tax on income from non-capital sources can meet many of the tests for a good local government tax for metropolitan areas. Such a tax would have significant revenue potential, an income-elastic tax base, and could be structured so that the tax burden falls mostly on those who benefit from the services provided, though problems

do arise with respect to those who cross provincial borders to reach their place of work.¹⁴ Administration can be simplified by a piggyback on the income tax base of a higher level government, as is done in many cities in Eastern Europe, by information sharing between local and higher level governments, or by levy against payrolls at the place of work.

Subnational government income or payroll taxes are rarely found in lower income countries. Perhaps the major drawback of the personal income tax as a local government revenue source is that it is cyclically sensitive. During the economic downturn in the last decade, personal income tax revenues in the cities of Riga, Bucharest and Budapest all declined significantly and had a major budget impact. There also are administrative problems to be reckoned with. Even central governments in some developing countries have trouble collecting much from the personal income tax (Bird and Zolt, 2005). Income taxes often carry income distribution goals, which are usually perceived to be the exclusive responsibility of the central government. Finally, efficiency problems will arise in jurisdictionally fragmented urban areas where there is a significant amount of commuting to work across municipal boundaries.

The case of Mexico City is instructive. State governments and the Federal District within metropolitan Mexico City finance a part of their budgets from a payroll (wage) tax collected and retained at the place of work.¹⁵ States (and the Federal District) are free to choose their tax rate, define the tax base and administer the tax. Since much of the income earned and employment in the metropolitan area is in the Federal District, the tax base is especially significant there. The Federal District collects 49 percent of the payroll taxes levied in the metropolitan area.

Sales taxes

Because a significant share of production and consumption takes place within the large urban areas in developing countries, the revenue potential of a local area sales tax is considerable. If levied on production, sales tax administration is feasible. Because consumption taxes are not so visible to taxpayers, they tend to be more acceptable than other forms of taxation that might support local governments. On the other hand, there are some important disadvantages to local government sales taxes, even in metropolitan areas. Because they are typically not levied as destination-based by local governments in developing countries, they will have undesirable efficiency effects. Depending on the tax base that is chosen, they may be regressive.

At the subnational government level in low-income countries, administration seems to be most feasible and revenue productivity greatest when the sales tax is levied against gross receipts (Argentina), or as derivation-based sharing on the central government sales tax (China). But in particular a gross receipts tax raises important problems. It creates distortions by shifting tax burdens from producing to consuming regions and by its cascading effect, and it discriminates against formal sector sellers, because informal sector sellers are unlikely to be in the tax net. Origin-based sales taxes also are subject to the 'headquarters problem' or the problem that arises when firms pay their tax bill at the central office location. In this case, the local government that plays host to the headquarters office may derive all the revenue from that company.¹⁶ While all of these reasons suggest that a gross receipts tax is not a good choice for financing governments in metropolitan areas, both equity and good economics are sometimes outweighed by the appeal of a significant revenue take.

The major own source revenue of Brazilian municipalities is a tax on services (ISS), almost all of which is collected by the largest municipalities (Rezende and Garson, 2006). The ISS and the urban property tax together account for about 60 percent of total local tax revenue. The ISS is imposed on the gross receipts of companies and individuals providing services, including hotels, restaurants and personal and professional services. National law fixes the minimum rate of the ISS at 2 percent as well as maximum rates that differ by type of service, with the usual maximum being 5 percent of gross revenue. Within this range, local governments may choose the tax rate.

Buenos Aires, both city and province, levy a gross receipts tax. The tax is complicated because the rate varies widely by type of product. For years there have been calls for replacing the gross receipts tax in Buenos Aires, but there has been little action because of the important revenue role that this tax plays, and because no acceptable replacement has been found. In Nicaragua, the local gross receipts tax is levied at a rate of 1 percent. Bogota derives much of its revenue from a gross receipts tax. The business tax in the Philippines is levied on gross receipts and accounts for about 30 percent of local revenues (Talierto, 2005). South African metropolitan cities collected a significant amount of revenue from a combination payroll and turnover tax, though the flawed structure of the South African tax led to its abolition in 2011. All of these taxes are levied on an origin basis, so all involve some degree of tax exporting. Moreover, there is the 'headquarters problem' as discussed above.

Some metropolitan area local governments in South Asia have raised significant revenue from the *octroi*, which is a combination of a sales tax and a terminal tax. It is levied on the estimated value of goods entering the local government area, according to a complicated rate schedule, and is collected at *octroi* stations. It imposes compliance costs on sellers (the waiting times at the *octroi* posts can be long) and is collected in a way that invites corruption. Nevertheless, the *octroi* is revenue productive, for example, it accounts for 50 percent of revenues for the Bombay Municipal Corporation. It has now been abolished in Pakistan and in all but three Indian states.

From a revenue perspective, there are successful sales tax revenue-sharing practices. A quarter of the state value added tax in Brazil is distributed to municipalities on a basis of point of collection. A similar arrangement exists for province-level cities in China. But these derivation-based revenue-sharing practices are more like intergovernmental transfers than local taxes since the local government has little or no voice in determining the tax rate or base.

Motor vehicle taxes

Motor vehicle taxation has great potential for metropolitan finances, yet its use for financing urban services is not widespread. The potential tax bases are large and growing, and there would seem a reasonable justification for taxing these to finance general services or to finance metropolitan transportation expenditures. Motor vehicle ownership and use might be taxed in a number of ways: motor fuel taxes, annual registration, toll roads, and parking charges all are possibilities (Bahl and Linn, 1992).

In theory, metropolitan local governments in developing countries could impose fuel taxes, but rates could not differ much from those imposed by neighboring governments. Only metropolitan governments that cover very large regions (such as provincial cities) would be good candidates. There also are administrative constraints to be overcome,

for example collection at the pump may not be feasible. In such cases, subnational government fuel taxes can be imposed at the refinery or wholesale level, with the refiner or wholesaler acting as a collection agent for the subnational government, and providing information on fuel shipments.

Central governments are hesitant to allow encroachment on the petroleum excise base. This is because of revenue sacrifice and because fuel prices are so sensitive a political issue that the center desires complete control. Moreover, local governments themselves are hesitant to take on the political cost that might come with heavier taxation of motor vehicle use. All of these factors considered, a shared tax with the provincial (or metropolitan government) might be a more feasible way to tap the motor fuel base. The City of Bogota levies a 20 percent surcharge on the motor fuels tax to fund a metropolitan transit company for provision of bus services. It accounts for about 15 percent of municipal revenues (Acosta and Bird, 2005).

Metropolitan governments in developing countries can feasibly levy annual automobile (and driver) license fees. The annual license for operating a motor vehicle could be administered within a metropolitan area by using number plates for the area. Physical monitoring (e.g. roadblocks) might be used occasionally to catch those who register outside the metropolitan area where tax rates might presumably be lower. An alternative might be revenue sharing of license taxes with a higher level of government. In Brazil, which has a jurisdictionally fragmented metropolitan government structure, the state government shares 50 percent of motor vehicle license revenues with municipalities according to place of registration. Within jurisdictionally fragmented metropolitan areas, motor vehicle licenses have the best chance for success when a uniform metropolitan area tax is imposed.

Charges and fees

Benefit charges of one form or another stand out as the best way to raise revenue when services can be priced (Oates, 1972; Musgrave, 1983; Bahl and Linn, 1992; Bahl and Bird, 2008). Levied correctly and properly enforced, user charges can recover the cost of services to which they are applied.

In theory, user and benefit charges can work well in any metropolitan governance structure, though if a higher quality of services is delivered by a separate company, there should be more willingness to pay for the service. User charges often are levied for essential services, and sentiments can run high when increases are necessary to cover rising costs. Public housing rents, water rates and bus fares are examples. One outcome is for such undertakings to be subsidized by the general tax base. For example, the Bucharest City budget includes payment of subsidies to both the transportation and the heating enterprises.

In fact, the cost recovery record for user charges in most developing countries is not a good one. The City of Cape Town collects about 35 percent of revenues from user charges, mostly electricity, water, sanitation and refuse collection. While the revenue take is quite large by comparison with many metropolitan cities, there is poor compliance and low collection rates (OECD, 2008). This is a not uncommon outcome in developing countries. For example, the Bangkok Metropolitan Administration collects only about 20 percent of charges due for garbage collection (Webster, 2000, p. 17). Mohanty et al. (2007) report a low rate of cost recovery for the Indian Metropolitan Cities of

Mumbai and Kolkata. By contrast, user fees in Bogota are sufficient to cover operating costs for the City's urban bus transport company.

Intergovernmental transfers

Central government revenues play a significant role in financing urban services in all developing countries. In some cases this is done with vertical programs (Egypt, Bangladesh) and in others with intergovernmental transfers (China, Russia, Mexico). Countries with strong equalization programs often discriminate against metropolitan area governments in their transfer formulae, for example South Africa and Brazil. The ten largest metropolitan areas in Brazil account for 30 percent of the population and 50 percent of GDP but received only 13 percent of revenue-sharing transfers (Rezende and Garson, 2006). Other components of the national transfer system are more focused on needs and on stimulating spending on services that are national priorities. Investments in slum upgrading and in infrastructure services that contribute to economic growth are in the national interest and often draw significant amounts of earmarked grants. How this plays out in the actual distribution of transfers varies from country to country.

In most countries, all local governments are subject to the same regime of intergovernmental transfers. The differential treatment of metropolitan local governments comes from the formulae applied or from provisions for vertical sharing. In some cases, however, a special treatment is reserved for metropolitan cities, sometimes to exclude them from certain flows to encourage self-sufficiency, and sometimes to recognize their special needs or, especially in capital cities, to compensate for the loss of property tax revenues on tax exempted public properties. In Rome, for example, a special central grant equivalent to about 15 percent of the current revenues of the City is given as a recurrent grant to recognize Rome's capital city status. Some metropolitan areas are given the same status as states or provinces, in which case they have both a state and a city entitlement to intergovernmental transfers. Another difference from the general regime occurs when a special program of intra-metropolitan government revenue sharing is in place.

The impact of central transfers on service delivery in metropolitan areas depends on the local government structure. The three levels of government commonly operating within metropolitan area boundaries – lower level municipalities, metropolitan governments and autonomous, special-purpose bodies – may be affected differently by the intergovernmental transfer system. A few examples can give a sense of the wide variation in the practice and in the impacts.

- In Cape Town, only 20 percent of Metropolitan City revenues are derived from grants. The major transfer in the system – ‘the equitable shares grant’ – is allocated nationwide on an equalizing basis. The result is that Cape Town and the other metropolitan cities in South Africa receive about half the per capita amount that goes to smaller cities.
- India is a case where there is a formal mechanism to control the distribution of grants to metropolitan cities. Direct federal grants to local governments are controlled by line ministries to support specific ‘schemes’, and these are heavily rural-weighted. On state government grants to local governments, the state decides on the pool to be allocated to the urban and the rural sector, and on the formula for

distribution within each sector. Equalization objectives often lead to a favoring of rural over urban local governments.

- The Metropolitan Manila Development Authority has no taxing powers and limited authority to levy user charges. It relies almost exclusively on grants from the central government and on mandated contributions from the underlying local governments units. In effect, the lower tier local governments pay the metropolitan governments for services delivered.
- Mexico has a highly centralized financing structure. Subnational government taxes account for less than 1 percent of GDP. Metropolitan services are financed primarily from conditional and unconditional transfers. However, the dependence on transfers is significantly less in the Federal District of Mexico than in the other states in Mexico.
- About 50 percent of revenues of the metropolitan municipality of Istanbul come from intergovernmental transfers, and half of this amount is the revenue-sharing grant which is distributed on a derivation (origin of collection) basis. This basis for distribution favors Istanbul greatly because of its large tax base, and because it receives a share of the tax paid by all companies that are headquartered in Istanbul.¹⁷
- Brazil uses both discretionary grants and equalization grants to support local governments. The former, for education and health, probably favors metropolitan cities, but the latter do not. Rezende and Garson (2006, p. 20) report that the ten largest metropolitan areas, which house 30 percent of the Brazilian population and generate about half of the national GDP, receive only about 13 percent of the divisible pool from shared income and industrial products tax.

5. SPECIAL ISSUES IN INFRASTRUCTURE INVESTMENT FINANCING

Investments in major metropolitan infrastructure programs (subways, highways, water and sanitation, broadband information technology, and suburban land development programs) generally represent huge and lumpy outlays that cannot and should not be funded by recurrent revenue sources usually available to metropolitan jurisdictions. However, there is potential to significantly increase the resource base for infrastructure investment finance in metropolitan areas. Some of this can take the form of increased national revenue mobilization with a pass-through using capital grant transfers or vertical programs in metropolitan areas. Some of this can also come from increased revenue mobilization by subnational governments in metropolitan areas in the form of local government debt financing, of funding via public-private partnerships, and of inflows of foreign capital.¹⁸

Own Source Revenue

The overall contribution of local revenues to supporting capital finance has not been impressive. Some cities – Buenos Aires, São Paulo and Bogota are examples – have done quite well with revenue mobilization, but most local governments in developing

countries have been less successful (Bahl and Sethi, 2012; Bird and Slack, 2013). Own source revenues of all subnational governments in developing countries are equivalent to less than 3 percent of GDP. However, there are several viable revenue options including property and land taxation, selective use of non-property taxes, and user and benefit charges (McCluskey and Franzsen, 2013; Bird and Slack, 2013; and Martinez-Vazquez, 2013).

Non-tax revenues are another viable option. Chinese metropolitan governments have been particularly innovative and have engaged heavily in land sales (long-term leases) as a method of mobilizing resources for infrastructure finance. For all local governments in China, land leases now account for about 30 percent of revenues (Wong, 2013). Land sales have great advantages, namely the revenue potential and the low political cost of raising money this way. But even in a unique setting like China, there are drawbacks, including the sensitivity of land revenues to the real estate cycle, and the riskiness of land value collateral for loans; the fact that the 'easy money' might tempt overspending in local government budgets (Wong, 2013).

Intergovernmental Transfers

Infrastructure projects may be directly funded by earmarked capital transfers, such as are used in São Paulo (Wetzel, 2013) and Mumbai (Pethe, 2013). There are many approaches. For example, a municipal infrastructure grant in South Africa is given for purposes of improving services in poor neighborhoods, and about a quarter of the allocations go to metropolitan area local governments (Van Ryneveld, 2007). A share of intergovernmental transfers is dedicated to debt repayment in Mexico.

Debt Finance

Borrowing is arguably the most efficient way to pay for public assets that have a long life because it allows matching payment for the infrastructure with the time pattern of benefits received. Larger urban governments have better access to capital markets because their economic bases are stronger and more diversified, there is more willingness to pay for better services, and in some cases they have significant revenue-raising powers.

The drawback is that debt finance may be too easy. The hypothesis that borrowing can be a danger of decentralization has been borne out by several experiences in recent years (Prud'homme, 1995; Tanzi, 1996; Braun and Webb, 2012). Over-borrowing has led to bailouts in metropolitan cities such as Buenos Aires, São Paulo and Johannesburg, and more recently in China (Wong, 2013). Some countries have tried to protect against this with fiscal responsibility legislation (Liu and Webb, 2011), but not always with great success. However, experience in the industrialized countries shows that a well-developed and supervised state and municipal bond market can be an excellent source of urban investment financing. As developing countries increasingly catch up with the economic and institutional capacity of today's advanced countries, the option of subnational bond financing should also become a standard tool of metropolitan infrastructure capital finance.

Government structure may be a complicating factor in metropolitan areas with fragmented government structures. Metropolitan area governments are in a better position

to access the area-wide tax base and in theory have a stronger ability to repay debt than do municipal governments in a fragmented metropolitan area structure of governance. In functionally fragmented systems, enterprises operating on a metropolitan area basis can support debt with a revenue flow from user charges.

The practice of borrowing by metropolitan local governments in developing countries and the success with debt finance varies widely among large urban governments. South African metropolitan governments borrow from a government-owned bank and through a privately-owned intermediary, but without a repayment guarantee from the central government (Van Ryneveld, 2007). At the other extreme are Chinese subnational governments, which could not borrow, but created a backdoor route with special-purpose urban investment companies that borrowed on behalf of the municipal government, and were supported by assets pledged by the municipal government (Wong, 2013).

Public–Private Partnerships (PPP)

Private investment has added relatively little to the financing of urban public infrastructure in developing countries in the last two decades (Annez, 2008; Alm, 2010). Less than 10 percent of PPP investment has been in the high priority water/sewer sector, and most has been focused on the energy, telecommunications and transport sectors.

The inherent riskiness of urban investments may be the main constraint to increasing the flow of private capital (Annez, 2008 and Ingram et al., 2013). There is a weak record of full cost recovery, and often an unwillingness of local governments to stand behind the kinds of tariff levels and regulatory arrangements that would be necessary to attract private investors. Pethe (2013) describes the failure to use PPP arrangements in Mumbai as being due to a ‘trust deficit’ between the public and private sectors, and a weak institutional capacity for dealing with PPP. In many developing countries, it seems unlikely that subnational governments will have a strong hand in negotiating such contracts. The Indian High Powered Commission on Urban Infrastructure (2011, p. 101) puts it well: ‘Weak governments cannot rely on private agents to overcome their weaknesses nor can they expect to make the best possible bargains for the public they represent.’ However, as with debt financing, these current difficulties should not rule out efforts to create long-term capacity in metropolitan areas for drawing on PPPs to help fund and manage major infrastructure investments.

Foreign Financing

With increasingly integrated global capital markets, metropolitan areas’ investment needs could in principle be funded, at least in part, by accessing foreign finance. However, there are a number of constraints: first, the difficulties to date in accessing national debt financing by definition extend to foreign debt finance, and if anything are more binding. National authorities are even more concerned about uncontrolled access to external indebtedness than they are about national debt, and they rightly worry about the foreign exchange risks which metropolitan authorities might assume in the absence of any natural hedge in the form of export earnings. Second, foreign PPP operations, while accessing a larger pool of potential private partners and financing, potentially face additional regulatory, policy and risk hurdles compared to their purely national counter-

parts. So, at least for the foreseeable future, foreign private capital is not likely to serve as a major source of capital finance in the metropolitan areas of developing countries.

But how about official sources of finance, that is, foreign aid? Here, too, the track record is disappointing (Kharas and Linn, 2013). Financing by official donors for urban infrastructure investment in general, and for metropolitan areas in particular, has been limited relative to needs and to other areas of donor engagement. Where donors have been involved, many of the difficulties of foreign aid have also applied here: donor fragmentation, lack of strategic and long-term engagement, and insufficient focus on evaluating and scaling up what works. In addition, donors have focused insufficiently or unsuccessfully on building local-level implementation and financing capacity. Concerted action and large-scale financing by donors, in the form of multi-donor partnerships with local authorities over multiple years and in support of well-articulated, comprehensive and flexible city plans, with built-in monitoring and evaluation to identify and scale up successful strategies, would be the answer for the future. Donors should also assist metropolitan governments in a targeted and sustained way to establish their credit worthiness and the capacity to engage in PPPs.

6. CONCLUSIONS

Relatively few developing countries have a comprehensive strategy for fitting the finance and governance of large cities in their general development strategy. Expenditure autonomy, tax assignment and borrowing powers for metro areas usually are made to fit within the existing regime for all local governments. The result is that policies to address the special problems of large cities have often been formulated as a response to specific issues. Examples are efforts to limit immigration as a means to control urban public sector costs, and special bailouts to accommodate budget deficits of large urban governments.

To the extent that countries choose to develop a comprehensive strategy for urban finance, it will be very country-specific and even city-specific. Movement toward such a strategy is more likely to be gradual than in the nature of a big bang. A general direction that might underlie an urban strategy is the adoption of an asymmetric intergovernmental system where the large urban area local governments have more autonomy in their fiscal governance. This would include more independence in determining their level and composition of budget expenditures, setting their tax rates and user charges, and deciding whether to finance capital expenditures with borrowing. What remains to be developed is a set of regulatory norms and enforcement mechanisms that will keep urban local governments within a hard budget constraint.

In most cases a metropolitan fiscal strategy will be designed around the present system of metropolitan structure, which generally reflects the relative preference for home rule in governance vs. the preference for technical efficiency and for accommodating spillover effects. In fragmented metropolitan government structures, where many municipalities operate within the urban area, expenditure autonomy offers opportunities to capture economic efficiencies because of the closer relationship between voters and their elected officials. Larger, area-wide governments offer the important advantages of being able to internalize the interjurisdictional spillover effects and to use a variety of broad-based

taxes. The presence of single-function special districts pushes the revenue structure toward user and benefit charges.

The main driver behind fiscal governance in metropolitan areas is politics. National-level politicians and bureaucrats have held to centralization in order to retain political control, and local political leaders often prefer more grants to more local taxing powers so that they may avoid full accountability. But events may have softened the political resistance to devolution. With the increase in urban population, the metropolitan area constituency is growing in political power, and may be more than ever in a position to sway votes. Moreover, the infrastructure of large cities is deficient, slums are large and growing, and the projected high rates of immigration will likely make matters worse for some time to come. A central government strategy of offloading the financing of urban services might both satisfy the demands of some metropolitan area governments, businesses and residents and free up the resources of higher level governments for other uses. Certainly, from the twin perspective of economic efficiency and democratic governance a more decentralized, accountable and self-sufficient financing of the metropolitan areas of developing countries is the right way forward.

NOTES

- * In this chapter, we draw heavily on Bahl et al. (2013) and Bahl (2010).
- 1. For example, see Phares (2009), Chernik and Reschovsky (2006) and OECD (2006).
- 2. For some earlier work on this subject in developing countries, see Smith (1974), Bahl and Linn (1992), Ahmad (2007) and Rojas et al. (2008).
- 3. For a good discussion of this, and some data for Indian cities, see Bandyopadhyay and Rao (2009).
- 4. In federal countries, a prior question is how much expenditure responsibility will be assumed by state or provincial governments.
- 5. For discussions of metropolitan area governance, see Bahl and Linn (1992); Bird and Slack (2004); Slack (2007); OECD (2006), Jouve and Lefèvre (2002) and Bahl et al. (2013).
- 6. For further discussion, see Bahl (2010).
- 7. For other papers on this topic, see Bahl and Linn (1992); Bird and Slack (2013) and Chernik and Reschovsky (2006).
- 8. One of the best statements of the theory is McLure (1998). For reviews and applications, see Musgrave (1983); Bahl and Bird (2008) and Martinez-Vazquez (2013).
- 9. A 'benefit tax' in this case could refer to any tax where the revenues raised are borne by those who benefit from the services financed. A residence-based income or payroll tax or a land tax would qualify, but an origin-based business tax would not.
- 10. Note also that even this amount is quite likely an overstatement. Many developing countries whose sub-national government tax share is close to zero do not report state and local government finance statistics to the International Monetary Fund (various years), hence are not included in this computation.
- 11. The exception to this rule is the burden of taxes on some non-residential properties that are not owned by local residents, and that sell products outside the local area.
- 12. For discussion of the practice of property taxation in developing countries, see Bahl and Linn (1992); Bird and Slack (2004); De Cesare (2004) and Bahl (2009).
- 13. McCluskey and Franzsen (2013) provide some evidence for a sample of cities, based on data gathered from primary sources.
- 14. The correspondence principle would call for a residence-based income tax, and for non-residents to file returns and pay an amount that would serve as a benefit charge for local services received. For a discussion, see McLure (1998).
- 15. For a discussion of the payroll tax in Mexico, see Diaz-Cayeros and McLure (2000) and Revilla (2012).
- 16. Derivation-based sales tax revenue sharing is subject to the same problem.
- 17. For a discussion of this 'headquarters problem' see Bahl and Solomon (2003).
- 18. There is a rich body of literature that properly questions the proposition that infrastructure spending is growth enhancing. That issue is not considered here, but for a good summary, see de Mello (2006).

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