



FINANCING METROPOLITAN GOVERNMENTS *in* DEVELOPING COUNTRIES

Edited by

ROY W. BAHL, JOHANNES F. LINN, AND DEBORAH L. WETZEL



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METROPOLITAN PUBLIC FINANCE

6

An Overview

RICHARD M. BIRD AND ENID SLACK

Let me tell you about the very rich. They are different from you and me.
—F. Scott Fitzgerald, “The Rich Boy”

Not all big cities are very rich.¹ But they are all, by definition, big, and most of them are also rich relative to smaller cities, towns, and rural areas in the countries in which they are located. These differences have substantial implications for metropolitan public finance. The most obvious reason that big cities are different is because they have a much larger population. They also have a population that is both more concentrated and more heterogeneous in terms of social and economic circumstances, often with a higher proportion of immigrants and in-migrants. Moreover, big cities are important generators of employment, wealth, and productivity growth and are often the major economic engines of countries. In the emerging global knowledge-based economy in which innovation is increasingly seen as the key to prosperity, most innovation occurs in large cities and metropolitan areas in which people can reap the benefits of close proximity, often referred to as agglomeration economies (Slack, Bourne, and Gertler 2003).² Big cities also serve as regional hubs for people from adjacent communities who come to work, shop, and use public services that are not available in their own communities. All these factors have significant implications for the magnitude and complexity of metropolitan public finance.

¹For simplicity, this chapter follows Angel (2011) in using *city* or *big city* interchangeably with *metropolitan area*. Studies of metropolitan areas frequently employ such different terms as *metropolitan cities*, *metropolitan regions*, *city-regions*, and *urban regions*. As Stren and Cameron (2005) discuss, these terms are used in different countries to refer to much the same concept: areas in which there is a large urban core (the “city”) plus adjacent urban and rural areas that are integrated socially and economically (if not legally) with the core. Unfortunately, at present, the great differences not only in definition but also in the structures, functions, and finances of metropolitan areas across (and even to some extent within) countries make it impossible to provide comparable cross-country data.

²As Glaeser and Gottlieb (2009) note, *agglomeration economies* are simply a way of saying that productivity rises with population, as indeed the evidence suggests. However, since productivity and population size are determined simultaneously, the precise magnitude and nature of such economies remain elusive, although, on the whole, as Glaeser and Gottlieb (2009, 1023) conclude, “the largest body of evidence supports the view that cities succeed by spurring the transfer of information.”

Although in most countries large cities and metropolitan areas are seldom treated very differently than other local governments (Bahl 2011), in practice their expenditures are often both much higher and different in nature. Moreover, in part because of their greater ability to pay, big cities should generally have more “fiscal autonomy” than other areas in the sense of being more responsible for delivering local services and for levying and collecting the revenues to pay for such services.³ One reason that such issues are not adequately addressed is that there seldom is a single “metropolitan government.” Instead, a variety of governments and public agencies provide local services and raise revenues within the metropolitan region. Because the political boundaries of governments in metropolitan areas rarely coincide with the boundaries of the metropolitan economic region, problems arise in coordinating efficient service delivery and sharing costs appropriately across the region.⁴ Such problems are often exacerbated by overlapping special-purpose districts that are responsible for delivering specific services, such as water or electricity, but within boundaries that are not coterminous with either local or regional governments. Although finance and governance are closely intertwined, the issue of metropolitan governance is not discussed further in this chapter.⁵

Instead, this chapter considers the following questions: Do big cities spend more and differently than smaller cities? Do big cities have more fiscal capacity to finance such spending? How should metropolitan regional finance be structured? The chapter then considers which revenue sources are appropriate for metropolitan cities and concludes with some reflections on how best to deal with the challenges facing metropolitan public finances in developing countries.

DO BIG CITIES SPEND MORE?

Local government expenditures are generally high in per capita terms in large metropolitan areas (Chernick and Reschovsky 2006; Freire 2001). Higher population density often implies a high concentration of problems as well as people. Urban poverty in close proximity to concentrated urban wealth may result in higher crime rates and more expenditure on policing. The higher concentration of special needs and public health problems may call for greater spending on social services. The different physical characteristics often associated with high density also incur costs: taller buildings require more specialized training and equipment for fire fighters, and the need to move large numbers of people around generally makes a good public transit system essential to the effective functioning of the metropolitan area. Moreover, since large cities around the world must increasingly compete on the international stage, they need to provide not only adequate “hard” services such as transportation, water, and sewers, but also, to be competitive in attracting and retain-

³This argument is further developed with respect to Latin America in Bird and Slack (2007).

⁴There are a very few exceptions, such as Cape Town, where the Municipal Demarcation Board set the geographic boundary of the city to coincide with the economic region.

⁵For further discussion of metropolitan governance and finance, see Bahl (2011), Bird and Slack (2007), Rojas, Cuadrado-Roura, and Fernandez Guell (2008), and Slack (2007a).

ing the knowledge workers on whom their prosperity often rests, such “soft” services as parks, recreational facilities, and cultural institutions (Florida 2002). All this costs a lot, and such costs are especially difficult to finance in rapidly urbanizing developing countries.⁶

For all these reasons, expenditures in the metros of South Africa, for example, are considerably higher than in other municipalities in the country. The six South African metros account for only 34 percent of the population but 59 percent of total local government expenditures in 2007–2008 (Steytler 2013).

Per capita local government expenditures not only are higher in large metropolitan areas but also are particularly high in the central cities within such areas. For example, municipal expenditures in the central city of São Paulo in 2009, with a population that is more than half of the metropolitan region, were twice as much as all of the suburban municipalities combined (Arretche 2013). This difference reflects higher expenditures in the central city on transportation, urban development, housing, and pensions for municipal employees.

Although metropolitan expenditures may be high, there may also be opportunities to take advantage of economies of scale in service provision.⁷ However, the evidence on the existence of economies of scale is mixed, varying both with the service in question and the unit of measurement (e.g., jurisdiction size or size of the facility).⁸

Although scale economies are often achievable with respect to central administrative and governance functions, as well as for services with large capital inputs such as public transportation and water and sewage systems, it is less clear that there are economies of scale for “people-related” (soft) services such as education.⁹ Moreover, the literature also suggests that diseconomies of scale may exist when cities become too large to deliver services efficiently. Bigness may have many virtues, but lowering the per capita costs of providing local public services is not one of them.

⁶Concerns with urbanization costs are not new. Earlier literature (e.g., Linn 1982; Richardson 1987) explored the possible impact of financing such costs on the economy in general and especially the possibly adverse impact on the nonurban population. The more recent literature, however, follows Glaeser (2011) in viewing such costs less as something to be minimized in order to free resources for more productive investment and more as a potentially productive investment in national economic growth.

⁷Cost differences are not the same as spending differences. Spending differences include not only differences in costs (based on factors beyond the control of the local government) but also differences arising from both local preferences for public services and waste or inefficiency.

⁸See, for example, Chernick and Rechovsky (2006), Fox and Gurley (2006), and Hermann et al. (1999). Many measurement problems have been identified in such cost studies. For example, population is commonly used as a proxy for output, and expenditures as a proxy for costs. But population is not a good measure of output: two municipalities with the same population might have very different outputs for a particular service because of demographic differences. Nor are expenditures a good measure of costs, in part because the pattern of expenditures may reflect differences in local government wealth. Since the local government fiscal base is likely correlated with population size, larger expenditures do not necessarily mean that costs are higher.

⁹Of course, expenditure patterns differ sharply from country to country, reflecting the governance structure and the distribution of functions. In Brazil, for example, by far the most important expenditure in São Paulo and Belo Horizonte is social protection (more than one-third of total metro outlays), followed by education (about one-quarter). In Cape Town, on the other hand, the most important metropolitan expenditures are on environment and electricity (about one-quarter each) (Slack and Chattopadhyay 2013).

DO BIG CITIES HAVE GREATER FISCAL CAPACITY?

Revenue patterns differ in metropolitan regions, reflecting both the different nature and level of services they provide and their greater ability to levy taxes. Larger cities usually have a larger per capita property tax base because of higher property values that reflect the extent to which urban public services are at least partly capitalized into land values. Not only do larger cities have above average commercial and industrial tax bases, but they also have higher agglomeration “rents” and can impose relatively higher taxes on such properties without losing tax base to competitive localities (Jofre-Monseny and Solé-Ollé 2008).¹⁰ Similarly, simply because of their higher level of economic activity, big cities are also more able to levy income and sales taxes, if they are allowed to do so. Sales taxes may be particularly attractive when substantial numbers of commuters and visitors from neighboring areas visit the city to work, shop, or enjoy cultural or recreational facilities. The broader the geographic area covered by the metropolitan government, the easier it is to impose such taxes.

Revenue levels in central cities are often higher than in the suburbs. In the case of São Paulo, for example, per capita revenues in the central city are approximately twice what they are in the suburbs, comparable to the difference in expenditures noted above (Arretche 2013). Both property taxes and local sales taxes are higher in per capita terms in the city than in the surrounding suburban municipalities. Of course, the fact that big cities may be legally and economically able to impose higher taxes than their smaller neighbors does not mean they will always do so. Big city mayors are no keener to tax their constituents than are their counterparts elsewhere when there is a politically less painful way to raise revenue, such as transfers.

ARE BIG CITIES TREATED DIFFERENTLY?

Bahl (2011) notes three broad ways in which countries may treat large metropolitan areas differently: city-state status, special taxing powers, and special intergovernmental transfers. Tokyo and the Special District of Bogotá are examples of city-states in which the metropolitan government has both city and regional (state) status and, as a result, has greater taxing powers than other municipal governments. Germany also gives broader responsibilities to three city-states, Berlin, Bremen, and Hamburg, which have both state responsibilities, such as education, security, and social policy, and local government functions, such as transportation, housing, and day care (Zimmermann 2009). German city-states collect both state and local revenues.

Even without city-state status, big cities are sometimes granted additional taxing powers. For example, Toronto is allowed to impose a number of taxes that other municipalities in the province cannot, such as a vehicle registration fee, a land transfer tax, and a billboard tax, although it has done little to exploit this additional taxing

¹⁰ Big cities must, of course, be careful not to push this argument too far. In Colombia, for example, where the largest city, Bogotá, both has more taxing power and utilizes that power more extensively than the municipalities surrounding the metropolitan district, there is some evidence that industry has to some extent migrated beyond the district boundary in response (Vazquez-Caro and Childress 2010).

power. New York City can similarly levy a wider range of taxes than most U.S. cities and gets significant revenue from corporate income and business taxes. Large U.S. cities rely less on property taxes and more on sales and income taxes, and they also depend more on own-source revenues than do smaller municipalities. In South Africa, metro governments, but not other local governments, were recently given access to fuel taxes.

Although one might expect that large metropolitan governments elsewhere would also depend less heavily on intergovernmental transfers than do other local governments, the reality is mixed. In Europe, for example, some do (e.g., Stockholm, Paris, Madrid, and Lausanne) and some do not (e.g., in Switzerland and in Eastern Europe) (Bahl 2011). In some capital cities (e.g., Berlin, Bern, and Brussels), the national government provides grants for specific services such as transportation, parks, or cultural facilities, although this appears uncommon. In Brazil and South Africa, as in Spain, large cities receive more grants than do smaller municipalities, apparently in recognition of the presumed higher costs of service provision in such areas.

Examples from less developed countries are also mixed in terms of dependence on intergovernmental transfers by large metropolitan areas compared with other cities. Cape Town derived 30 percent of its revenues from operating and capital transfers in 2008–2009 (Steytler 2013). Because the major transfer is an equalizing transfer, the metros receive a much smaller per capita grant than do smaller cities (Bahl 2011). The Federal District of Mexico also receives significantly less in transfers than do other states in Mexico (Bahl 2011), as does the Special District of Bogotá (Bird 2012). Metropolitan areas in Brazil similarly rely more on own-source revenues than do other municipalities in the country; São Paulo, for example, receives nearly half of its revenues from self-generated taxes (Arretche 2013). On the other hand, Istanbul receives more transfers than smaller municipalities in Turkey because the main transfer is a revenue-sharing grant that is distributed on a derivation basis (Bahl 2011).

FINANCING METROPOLITAN CITIES

An important rule of sound fiscal decentralization is that finances should follow functions (Bahl 2002). Local governments need access to adequate revenue sources to finance the public services they are mandated to provide. How urban public expenditures are financed is a key issue in urban planning and development. Since every city is different, no single approach will suit all. The appropriate strategy for any city will differ depending upon a variety of factors, such as its size, economic conditions, the composition of various population groups within the city, and the extent of urbanization.

As the European Charter of Local Self-Government (Article 9, paragraph 2) puts it, “Local authorities’ financial resources shall be commensurate with the responsibilities provided for by the constitution and the law.” Those that spend the most, usually the largest cities, obviously need more to spend. For the most part, however, they also have the most to tax. It follows that they should be largely responsible for raising the necessary funds themselves. However, the traditional theory of

fiscal federalism prescribes a very limited tax base for local governments.¹¹ The only good taxes are said to be those that are easy to administer locally, are imposed mainly on local residents, and do not raise problems of harmonization or competition either horizontally (between local governments) or vertically (between local and central governments). Such prescriptions appear to impose severe limits on the revenue instruments likely to be open to big cities. These instruments fall under three headings: (1) own-source revenues: current revenues that are to a significant extent under direct local control; (2) transfers from other levels of government; and (3) sources of capital finance.

Own-Source Revenues

A truly local revenue source might be defined as one whose base is determined by local governments, that is levied at rates decided by local governments, and that is collected by local governments (Bird 2006). In the real world, however, many taxes possess only one or two of these characteristics, and the “ownership” of a particular levy in these terms is often unclear. In some countries, for example, a tax may be called a *local tax*, and part or all of its proceeds may accrue to a city, but the rate and base of the tax are determined by a central or provincial/state government. Such taxes are best thought of as central or provincial/state government taxes that are allocated to cities through a form of transfer. This interpretation is particularly plausible when there is little connection between the amount transferred and the amount collected locally. In appraising local taxes, names and appearances can be deceiving.¹²

USER CHARGES

Consider first the obvious point that local governments should, wherever possible, charge directly for services (Bird 2001). Appropriately designed user fees allow residents and businesses to know how much they are paying for the services they receive from local governments. When proper prices are charged, governments can make efficient decisions about how much to provide, and citizens can make efficient decisions about how much to consume. All too often, however, a vicious circle exists in which the low quality of local public services makes it difficult to collect user charges, with the result being further deterioration in the service levels.

This circle needs to be broken, and not just to obtain the revenues needed to improve services. User charges are also an important way to provide signals, both to consumers of the scarcity value of services and to providers about the demands that need to be met through service provision. Establishing a strong link between demand and supply by forcing both sides to face the real opportunity costs of service provision helps to generate resources for services that people really want and are willing to pay for and also to ensure efficiency in production and accountability in service delivery. User charges are especially appropriate for services such as

¹¹For a critical review of the traditional theory, see Bird (2009).

¹²This issue and the degree to which revenue sources are under local control vary from country to country, as discussed further in Ebel and Yilmaz (2003) and OECD (1999).

water and public transit, where most direct benefits are confined largely to individual consumers.

Charges are especially important in large metropolitan areas because they not only result in more efficient use of services but also encourage more efficient land use. When marginal cost prices are charged, consumers who are far away from existing services and hence more costly to serve will pay more, and those closer will pay less. The distributional impact of such pricing obviously depends on who lives where and is hence very context specific; with respect to water pricing, for instance, the poor may live higher up (as in Cali) or lower down (as in Nairobi). On the other hand, uniform pricing of urban services, while often politically appealing, is usually economically inefficient. Studies in Chile, for instance, show that underpricing and distortions in water and sewer pricing have resulted in severe locational distortions (Daniere and Gomez-Ibañez 2002). An additional important benefit of more appropriate pricing of urban services is to reduce pressure on urban finances by reducing the apparent need for more investment in underpriced infrastructure. If something costs users nothing, they will generally want more of it, but this does not mean that cities should continue to give it to them for nothing.

All this has been known for years (Bahl and Linn 1992). However, not much has been done along these lines anywhere, essentially for political reasons. Despite the clear (if not always simple) economic advice available on how to design and implement charges and some evidence that people accept the benefit principle at least to some extent, urban user charges appear in most cases to be neither popular nor particularly well designed anywhere.¹³ A common reaction to suggestions to increase reliance on user charge financing, for example, is that the results are simply too regressive to contemplate. In reality, almost the opposite is true in most large urban areas: those who benefit most from underpricing services are those who make the most use of them, and the poor are not well represented in this group (Bird and Miller 1989). Relatively simple pricing systems such as low initial “life-line” charges for the first block of service use often can deal adequately with any remaining perceived inequity from introducing more adequate pricing systems.

The political economy problems of user charge pricing are much deeper than simple concerns with perceived regressivity. Imposing prices on services that were previously provided for free or increasing prices on heavily subsidized services inevitably arouses substantial opposition, particularly when, as is usually the case, those who must pay receive (and perceive) no offsetting benefit for doing so. The politics of user charges are perhaps more difficult in large cities than in smaller communities owing to lower visibility of the direct connection between the amount people pay and the amount of services they receive. On the other hand, getting one’s neighbors to accept charges for services is not necessarily easy, even (or perhaps especially) when everyone knows everyone else in the neighborhood.

A possible way of balancing some of these considerations may be for some city functions to be carried out, and the revenues to pay them obtained, at the

¹³The sorry state of most user charges in urban North America is set out in such early studies as Bird (1976), Meltsner (1972), and Mushkin (1972). No changes for the better were evident 25 years later (Bird and Tsiopoulos 1997), or now.

neighborhood level, as is done, for example, with a form of land value increment tax in Colombia. Another way to reduce the political pressure on local governments may be to turn over the provision of “chargeable” services like public transit and water supply to a public or even private enterprise. This approach may not increase the likelihood of a sensible charge policy, but it may at least make it easier to finance and provide such services in a metropolitan service area that is fragmented among a number of different governments.

PROPERTY TAX

The property tax is appropriate for financing local services for at least two reasons. First, real property is immovable: it cannot move away when it is taxed. Second, to the extent that there is a visible connection between the types of services funded at the local level and the benefit to property values, the accountability of local governments to local residents may be substantially improved. If a property tax (whether levied on a unit-value or market-value basis) roughly approximates the benefits property taxpayers receive from local services, it is like a tax on the capitalized value of those benefits. Residential property taxes are particularly appropriate to fund local governments because they are borne by local residents.¹⁴ From this “generalized user charge” perspective, residential property taxes may thus again be seen as a way to ensure that those who enjoy the benefits of local services are required to pay for them.

The nonresidential portion of the property tax, generally the most important part of the tax in many countries, while equally appropriate for financing cost-reducing services provided to businesses, is less appropriate for financing local government expenditures directly benefiting residents (Slack 2011).¹⁵ Because taxes on business may be partially exported to residents of other jurisdictions who are consumers of the products or services produced in those properties, there is less accountability. Those who bear the burden of the tax are not those who enjoy the benefits. To the extent such taxes are exported to residents of other jurisdictions, restrictions on local tax autonomy may be needed, such as a maximum rate or perhaps even a requirement that a uniform rate be levied on residential and nonresidential property. Even if agglomeration rents permit metropolitan governments to impose higher rates on business property than do other governments, restrictions may still be needed in metropolitan areas to prevent excessive tax exporting to consumers outside the metropolitan area.

Despite their many virtues as a source of local revenues, relying solely on property taxes for metropolitan revenue substantially reduces the scope of services the big cities are able to provide from their own resources. No country seems able to raise more than 10 percent of total tax revenues from the property tax (OECD 2006), in part because the property tax is relatively costly and difficult to administer properly. The difficulty in pushing for revenues from this source is exacerbated as the size of the tax burden increases.

In some instances, simplified procedures, for example, area-based assessments in such cities as Bangalore (Bengaluru) and the introduction of self-assessment in

¹⁴For a fuller discussion of property tax incidence, see Bird and Slack (1993).

¹⁵In Poland, for example, 85 percent of property tax revenues come from business property (Swianiewicz 2011).

such cities as Bogotá, have led to significant immediate increases in property tax revenues.¹⁶ However, any gains are likely largely transitory in nature, reflecting more the failings of the preexisting system than any particular virtues of these approaches to property tax administration. Such reforms may serve a useful interim purpose both by increasing revenues and by creating the essential administrative framework and making the tax more acceptable, paving the way over time to a “gold standard” property tax: a well-administered tax based on current market values.¹⁷

In any case, even a well-administered local property tax is unlikely to be able to finance major social expenditures (education, health, social assistance). Local governments financed primarily by property taxes must either confine their activities to providing such purely local services as street cleaning and refuse removal or remain heavily dependent on transfers from senior levels of government.

Furthermore, property tax revenues respond less quickly to changes in the economy than do taxes on income or sales because economic growth is not fully capitalized into real estate investment and land ownership. Even if property values do increase, tax revenues are unlikely to increase proportionately because assessed values are seldom updated on a regular basis (Bird and Slack 2004). On the other hand, as part of a balanced revenue portfolio, there is much to be said for the relative stability of property tax revenues, as has recently been demonstrated in countries in which land transfer taxes and other revenue sources were substantially expanded by a boom in housing prices, only to decline sharply when prices fell.

INCOME TAX

In principle, a strong case can be made for a local income tax to supplement property taxes for large metropolitan governments that are increasingly being called upon to address issues of poverty, crime, land use planning, regional transportation, and other regionwide needs (Nowlan 1994). To the extent that large metropolitan areas are required to provide social services, an income tax is a more appropriate revenue source than a property tax because it is more closely related to ability to pay. Furthermore, since mobility across jurisdictions in response to tax differentials is less the larger the geographic area, large metropolitan areas are more able than other local governments to take advantage of income taxes. Even within the largest metropolitan areas, however, it is probably desirable to “piggyback” onto higher-level income taxes (i.e., to levy the tax as a supplement to a central or provincial/state income tax) rather than to impose independent local taxes. However, this may be too much of a stretch in developing countries in which even the central government income tax is often a weak and limited source of revenue (Bird and Zolt 2005).

A quite different justification for income taxes for large metropolitan areas might be on grounds of benefits received. Since the residential property tax is tied to the consumption of housing rather than the consumption of public goods, even

¹⁶For discussion of the Bangalore and Bogotá cases, see, respectively, Rao and Bird (2010) and Acosta and Bird (2005).

¹⁷See Bahl (2009) on paths to property tax reform in developing and transitional countries. Connolly and Bell (2010) provide an interesting comparison of the relative merits and effects of area-based and value-based property taxes in Lithuania.

this portion of the property tax is a benefit tax only to the extent that housing consumption and local goods consumption are highly correlated across different households (Thirsk 1982). In large metropolitan areas with a heterogeneous population, in all likelihood incomes are more highly correlated with consumption of public services than are property values.

Finally, because income taxes increase or decrease in response to changes in wages and salaries, local revenues will increase more quickly in economic expansions. Of course, the other side of this coin is that they will also decrease more quickly in an economic downturn, so even cities with income taxes need more stable property taxes in their revenue portfolio.

GENERAL SALES TAX

General sales taxes are seldom levied by even the largest local governments outside of a number of U.S. states, except in the highly undesirable form of a gross receipts tax. In Brazil, however, the major source of municipal taxation is the service tax (*imposto sobre serviços*, ISS), which is imposed on all services except communications and interstate and intercity public transportation, which are taxed by the states. Generally, the ISS is imposed on retail sales at a minimum rate of 2 percent, with maximum rates that differ by the type of service, the usual maximum being 5 percent of gross revenue. More presumptive methods of assessment are used in some cases. Most analysts in Brazil think that this cascading tax is not desirable and suggest that it should be abolished and services incorporated more fully into a comprehensive value-added tax (Werneck 2007). Much the same has been said at times about the industry and commerce (*industria y comercio*) tax in Colombia, a classified gross receipts tax on a wider range of businesses at lower rates that is both the most revenue-elastic form of local taxation in Colombia and often the largest source of revenue in the largest cities (Bird 2012). However, critics of such “bad” taxes have paid little attention to the need to provide local governments, particularly those in large urban areas, with an elastic source of revenue that is within their control.

The ISS and industry and commerce taxes, like other local sales taxes that are really gross receipts taxes (e.g., China’s local business tax), apply to all sales in the taxed sector, including all sales to other businesses. Unlike true value added taxes, businesses do not receive credits for taxes already paid on purchased inputs. Such taxes, particularly when applied not just to services, as in Brazil (and, for the most part, China), but to both goods and services, as in Colombia, may in principle have a very broad base (much broader than gross domestic product, which equals final sales or value added), so they may generate a lot of revenue for a relatively low tax rate. They are also relatively simple to implement, since doing so does not require the government either to determine whether sales are to households or businesses (since all sales are taxable) or to keep track of taxes paid by businesses on their purchased inputs (since these taxes are not deductible from a company’s own tax liability). The major problem with gross receipts taxes is that they take a flaw found in most retail sales taxes, the taxation of business inputs, and elevate it to their defining characteristic. The result is substantial tax cascading with consequent distortion to the organization of production in order to reduce tax liabilities.

Nonetheless, even if the only local sales tax is a bad one, a case can be made for it as addressing some of the externalities in municipal services when some beneficiaries of services, such as commuters and visitors, do not otherwise have to pay for them. Sales taxes would both give big cities more choices in determining their own tax structure and allow them to benefit more directly from growth in local economic activity than would a property tax, while at the same time discouraging savings and growth less than an income tax. However, since evasion both is economically distorting and erodes the tax base, large rate differentials between neighboring jurisdictions are unlikely to be sustainable over long periods of time. Piggybacking onto the central or provincial/state tax system with an additional city sales tax of 1 or 2 percent, however, would avoid many of the problems associated with a local sales tax, including high administrative and compliance costs.¹⁸

SELECTIVE SALES TAXES

As Bahl and Linn (1992) emphasized, taxes and charges on automobiles such as fuel taxes, vehicle registration levies, parking fees, and tolls on major roads are doubly useful: they both discourage road use and produce revenues. The message is powerful, and the logic is persuasive, at least to most economists. As in the case of user charges more generally, however, almost no one (outside of Singapore) seems to have been listening. The most important tax on automobiles from a revenue perspective is the fuel tax, which is also the simplest and cheapest from an administrative perspective. While difficult to levy locally, fuel taxes can generally be levied at a regional level, including in a metropolitan region, although regions would probably not be able to differ much from the rates imposed by their neighbors, given the mobility of the tax base.¹⁹ Cities that levy a fuel tax generally piggyback onto state/provincial fuel taxes, principally because the administrative costs of levying their own taxes would be prohibitive. The revenues generated from such taxes are often earmarked for local roads and transit services. In South Africa, for example, the National Treasury introduced sharing of the national fuel tax levy, for metros only, starting in October 2009. Fuel tax sharing is being phased in, and the metros receive 50 percent of the fuel tax levy share as of November 2010 (Steytler 2013).

However, if automotive taxation is intended to price either externalities (congestion and pollution) or the use of publicly provided services, fuel taxes are at best a crude instrument. Tolls and an appropriate set of annual automobile and driver license fees are preferable. For example, vehicle fees might be based on such features as age and engine size (older and larger cars generally contribute more to pollution), location of the vehicle (cars in cities add more to pollution and congestion), and axle weight (heavier vehicles do exponentially more damage to roads and require roads that are more costly to build). Road tolls and congestion charges, together with appropriate regulatory policies, have been used successfully, for example, in Singapore and London. However, while the merits of this approach from both

¹⁸Such piggybacked sales taxes can work well at the regional level even in countries in which the central sales tax takes the form of a value added tax (Bird and Gendron 2001). However, the only value added taxes that now exist anywhere at the local level appear to take the quite different form discussed below in the section on business taxes.

¹⁹Such local fuel taxes currently exist in at least eight U.S. states (American Petroleum Institute 2012).

the developmental and the revenue perspective have frequently been pointed out (Bird 2005), countries have proved extremely reluctant to follow this politically unpopular road, even though it leads not just to better urban finance but also to less sprawl and a more efficient pattern of urban development (Slack 2002).

Finally, parking fees in major metropolitan cities may potentially generate substantial revenues. The main rationales for levying parking fees are to reduce congestion of vehicles on the roads and to generate resources to construct parking spaces. At first glance, these two objectives may seem contradictory since increasing parking spaces in itself might seem more likely to induce rather than reduce road congestion. However, in most big cities in developing countries, the poor quality of the public transportation system combined with inadequate provision of parking spaces for vehicles and poor enforcement of street parking regulations results in large-scale traffic congestion on roads. With sharp increases in household incomes and the emergence of a large middle class in countries such as India, the number of vehicles is going to increase sharply in the coming years. Introducing a more comprehensive policy of charging parking fees in accordance with the scarcity value of open spaces in cities as part of a more rational road and urban policy should reduce congestion problems. While such a policy may also generate revenues to construct multistoried parking places, a strong case can be made for letting the private sector deal with the business of providing (taxable) parking facilities, with the public sector concentrating on its proper task of enforcing street parking regulations (Barter 2010).²⁰

BUSINESS TAXES

Many countries have regional and local business taxes in the form of corporate income taxes, capital taxes, nonresidential property taxes, transit taxes (*octroi*), license fees (*patente*), and various forms of industry and commerce taxes (Bird 2003). Most of these taxes would not score highly on most reasonable criteria. In India, for example, in most big cities the most important revenue source is often *octroi*, an archaic local levy on goods entering the city, which a few years ago was reported to account for 70 percent of urban tax revenue in the country as a whole, compared with only 20 percent for property taxes (Rao and Singh 2005). Economists as a rule dislike *octroi* (essentially a local import duty) as an inefficient, distortionary tax that is often administered very corruptly. Although some states have abolished this tax, in some instances it has been replaced with an “entry tax” with similar characteristics. In most cases, when states abolished *octroi*, they provided no alternative source of revenue and simply increased the size of the unfunded mandates confronting municipal governments (Rao and Bird 2010).²¹

Few such crude local business taxes are equitable. Almost none are neutral. Most accentuate the disparities between localities, giving most to those who have

²⁰ Creating better parking infrastructure in the central business district of major cities may be an appropriate area in which to explore the public-private partnership approach to capital finance, discussed below.

²¹ As Pethe (2011) discusses, Maharashtra state recognized its inability to provide adequate offsetting transfers to Mumbai for the loss of *octroi* revenues and decided, while abolishing the levy in general, to leave it in place in Mumbai, a curious example of one of the developing world’s most dynamic and expanding cities relying to a surprising extent on one of the oldest (and least economically efficient) forms of local revenue.

most, though this may, of course, make them especially attractive to metropolitan areas. Most such taxes also lend themselves to tax exporting, thereby violating the correspondence principle that those who pay should be those who benefit. Such taxes are sometimes costly to administer.

Despite such defects, city governments often impose various taxes on local business. Such taxes are popular with officials and citizens for several reasons. They produce substantial revenue and are more responsive to economic growth than are property taxes. Moreover, cities often have more discretion over the rate, base, and application of such taxes than for any other form of taxation. In Colombia, for example, the industry and commerce tax has often been the major source of revenue growth for Bogotá and other such large cities as Cali and Medellín (Bird 2012). Since no one is quite sure of the incidence of such taxes, it is easy to claim that they are paid by someone other than local residents, which makes them more politically palatable, though less accountable, than other taxes such as the property tax.

In addition, a good economic case can sometimes be made for local business taxation as a form of generalized benefit tax. Ideally, specific public services benefiting specific businesses should be paid for by appropriate user charges; however, when for some reason, technical or political, such user charges are not feasible, some form of broadly based, general levy on business activity may be warranted. This argument suggests that a broadly based levy neutral to factor mix, such as a tax on value added, is likely the best form of local business tax (Bird 2003). Such a tax was introduced in 1998 in Italy and was adopted in 2004 in Japan and in 2010 in France.²² However, considerable attention must be paid to the details of both design and implementation if such local business taxes are not to create a major barrier to the formalization of small and new businesses (World Bank 2007).

A PORTFOLIO OF TAXES

None of the potential sources of metropolitan revenue discussed briefly above is perfect, though, curiously, the one that comes closest in economic terms (user charges) is perhaps the least (and worst) used of all those listed, for reasons that have been discussed elsewhere (Bird 2001). Perhaps the best approach is to provide metropolitan cities with access to a portfolio of taxes adequate to provide both enough stability (through the property tax) to provide a stable source of local government finance and enough elasticity (through good income, sales, or business taxes) to finance the expanding services almost certain to be needed by large and rapidly expanding urban areas in developing countries.

Intergovernmental Transfers

Big cities are more able to levy and collect their own revenues than are smaller cities. They thus need to rely less on grants from senior levels of government.²³ Even though

²²See Bordignon, Gianni, and Panteghini (2001) on Italy and Gilbert (2010) on France. The Japanese system is described in Ministry of Internal Affairs and Communications (2012).

²³Although there are at least as many problems in classifying transfers as there are in classifying the degree of autonomy with respect to local taxation (Kim, Lotz, and Mau 2010), this subject is not discussed further in this chapter.

their expenditure levels are also generally higher, on the whole big cities should receive less in grants on a per capita basis than do smaller and rural municipalities. The relatively higher costs of services and the greater need for services in big cities than in other urban areas seem unlikely to outweigh the much greater potential tax base.²⁴ An alternative way to achieve equity may be to design the governing structure to cover the entire metropolitan area. By combining rich communities and poor communities, equalization can take place at least within the metropolitan area. Such equity concerns were, for example, the main reason that the one-tier governance model was adopted in 2000 in Cape Town, South Africa (van Ryneveld and Parker 2002).

In some instances, however, when big cities provide services whose benefits spill over municipal boundaries, intergovernmental transfers, horizontal or vertical, are required to ensure allocative efficiency (Slack 2007b). In large metropolitan areas, some externalities can be internalized within the jurisdiction if boundaries are extended to include all of the users of the service. Nonetheless, for services that generate externalities beyond the borders of the metropolitan area, such as “hub” or nodal services for national transportation or other networks or clear contributions to national competitiveness in the international economic arena, some transfers may still be appropriate.

On the whole, however, in both principle and practice, transfers are less important for large metropolitan areas than for other local governments. Indeed, in countries with wide regional economic disparities, there seems to be little reason that the wealthiest regions (including big cities) should not be able to raise and spend most of their budgets themselves, although even they seem likely to remain to some extent transfer dependent when it comes to financing expensive services with substantial national implications, such as health and especially education. To achieve this goal and to reduce their present dependence on intergovernmental transfers, large metropolitan areas need not only an appropriate governing structure but also more and different revenue sources than other local governments.

Sources of Capital Finance

Good physical and social infrastructure is essential to the economic, social, and environmental health of cities. Cities not only have to provide roads, transit, water, sewers, and other hard services but also have to provide soft services that enhance the quality of life in their communities, such as parks, libraries, social housing, and recreational facilities. Metropolitan infrastructure, like metropolitan spending in general, should usually be financed locally. Often, the most sensible way to do so is to borrow. Other sound ways to pay for infrastructure in particular cases may include such instruments as development charges and PPPs (public-private partnerships).²⁵

²⁴The costs of services in remote areas tend to be even higher than in large metropolitan areas, owing to higher transportation costs (greater distances), higher heating costs (climatic conditions), and so on (Kitchen and Slack 2006). However, particularly in small countries (e.g., Switzerland), these factors may be offset by those resulting in higher costs in more urbanized areas.

²⁵A case can be made for “capital grants” from national or state governments when a given infrastructure activity is expected to yield substantial external benefits that will “spill over” to other areas. Such grants are sometimes disguised as loans (that are subsequently forgiven or not repaid) or subsidized loans (from public-sector

BORROWING

Borrowing is generally a perfectly appropriate way to pay for capital expenditures. Where the benefits of a capital investment (e.g., the construction of a water treatment plant) are enjoyed over a long period of time, say, 25 years, it is both fair and efficient to pay for the project at least in part by borrowing so that the stream of benefits matches the stream of costs through the payment of debt charges. On the whole, big cities tend both to have greater access to bond markets than do smaller municipalities and tend to pay lower servicing costs.

Borrowing allows a municipality to enjoy the immediate benefit from the capital improvement, which is not always possible when relying on current revenues (taxes and user fees), which are in any case seldom sufficient to fund large expenditures on a pay-as-you-go basis. Since the pattern of capital expenditures is lumpy, a city may need substantial funds to finance an infrastructure project in one year and then much less for the next few years. Borrowing allows municipalities to avoid large year-to-year fluctuations in tax rates.

The main disadvantage of borrowing from a local perspective is that loans not only have to be repaid at some point but also generate interest obligations that must be serviced annually. Revenues dedicated to debt repayment cannot be used to meet other current expenditures. The costs of the capital project are spread over time, but the need to service the debts constrains local fiscal flexibility. This problem may be particularly important when local revenue streams are volatile. Cities that have less debt and hence lower debt service obligations obviously have more flexibility to respond to unanticipated future events.

Local governments in many developing countries are restricted from borrowing.²⁶ In some countries, such as China, local governments have found a way around these restrictions. They have created independent, wholly owned companies whose activities are “extrabudgetary” (Wong and Bird 2008). These companies are used to provide funding for development projects and, in particular, infrastructure. They are permitted to borrow on the capital market and are backed by assets (e.g., land) transferred to them by the municipality or the revenue stream from their projects. Because of their extrabudgetary status, however, they do not use standardized accounting and reporting systems and do not face the same level of public scrutiny.

DEVELOPMENT CHARGES

A development charge is a one-time levy imposed on developers to finance growth-related capital costs associated with new development (or, in some cases, redevelopment). These charges are levied for works constructed by the city, and the funds collected are used to pay for the infrastructure made necessary by the development. The rationale for charging developers for such costs is in part one of equity, that growth should pay for itself and not be a burden on existing taxpayers, and in part simply to

financial institutions). The “grant” element may vary substantially from case to case. For a discussion of the many different ways that urban infrastructure is financed around the world, see Annez (2010).

²⁶Even when localities can borrow, they are often not eager to do so. In Canada, for example, even the largest cities, with relatively unrestricted access to capital markets, borrow much less than seems optimal (Bird and Tassonyi 2001). On the other hand, smaller municipalities often have little direct access to capital markets unless their debt obligations are guaranteed or “pooled” by higher levels of government.

expand the capacity of local government to carry out infrastructure development without incurring new debt or requiring taxpayers in general to pay higher taxes.²⁷

Although development charges are widely used in North American jurisdictions to pay for infrastructure costs that are external to the development (e.g., major roads and trunk sewer lines), only charges for internal infrastructure are common in less developed countries (Peterson 2009). One exception is Santiago, Chile, where development charges are levied to cover the costs of major roadways necessitated by development.

Who ultimately pays development charges (the new buyer, developers, or predevelopment landowners) depends largely upon the demand and supply conditions in the market for new housing or commercial or industrial buildings (Slack and Bird 1991). Over the long term, however, it seems likely that in most circumstances charges imposed for new developments are borne by buyers. If properly implemented, such development charges act, in effect, as a form of marginal cost pricing and hence induce more efficient development patterns and discourage urban sprawl (Slack 2002). For this to be true, however, development charges generally need to be differentiated by location to reflect the different infrastructure costs. In practice, this seldom appears to be the case in North America, at least, although some of the experience in Latin America with land-based charges appears to have induced more efficient land use (Peterson 2009).²⁸

PUBLIC-PRIVATE PARTNERSHIPS

Public-private partnerships (also known as P3s) are partnerships between a government body and a private-sector party under which the private sector provides infrastructure or services that have traditionally been delivered by the public sector. PPPs do not necessarily mean full privatization; the government body retains ownership of the assets and sets the policies and level of service. These partnerships are widely used in Europe and Australia, reflecting the expectation of an improvement in the efficiency and effectiveness of local public service delivery and, in some instances, the desire to reduce the public-sector financial obligations connected with such projects.

²⁷Many other levies are sometimes imposed on developers: land dedications that require the developer to set aside land for roadways, other public works, school sites, or environmental purposes; parkland dedications that require a portion of the land used for development to be set aside for parkland or that a cash payment in lieu of parkland be made; density bonusing, under which developers are granted higher densities than permitted in return for meeting conditions such as providing day care, preserving an historic building, and so on; connection fees to permit developers to buy into existing capacity of water and sewer facilities; and oversizing provisions (sometimes called front-end financing) that require developers to provide more infrastructure than is strictly required for their development.

²⁸See also the recent discussion of “betterment levies” in Colombia in Borero Ochoa (2011) for an example of an unusually successful use of taxes on estimated land value increments to finance local public works. Interestingly, although the Colombian experience has been noted and praised for many years (Rhoads and Bird 1967), and superficially similar legislation exists in a number of other Latin American countries (Macón and Mañón 1977), no other country in Latin America has made such successful use of it, and indeed, only a few cities in Colombia itself have consistently done so. The keys to success appear to be a capable and credible local administration that establishes a clear link between benefits and taxes and delivers “value for money.” Of course, much the same could likely be said about any effective and sustainable system of local finance.

One of the main advantages of PPPs for local governments is that, by relieving municipalities of the financial responsibility for up-front capital costs, they may enable infrastructure to be built at times when government funding is constrained (Tassonyi 1997). PPPs offer a way to get facilities built without incurring highly visible government debt. The operation of facilities and programs by private operators also reduces municipal operating expenditures and may enable additional revenue to be collected. Ancillary uses such as retail can be accommodated within facilities to provide another source of revenue. Finally, the public sector can draw on private-sector experience and skill.

On the other hand, potential risks are also associated with PPPs (Tassonyi 1997). For the private sector, there are risks that the regulatory framework could change and cause delays in the project. For the public sector, there is the risk that the nature of the public services provided will not be what the public wants. There may also be the risk that the private partner will fail and the public sector will have to take on the obligation in full, as has sometimes happened, for example, with respect to sports facilities. As with any partnership, how successful such arrangements are from the perspective of either partner depends very much on the exact details of the contractual arrangements regarding structure and risk-sharing.²⁹

CHALLENGES AND ISSUES FACED BY METROPOLITAN AREAS

Even this brief outline of metropolitan public finance in practice and theory makes it clear that many challenges and issues face big cities around the world, and especially those in developing countries. One common problem, for example, is that the division of expenditure responsibilities is either not clear or simply wrong, as is arguably the case with respect to the extensive downloading of social financing on local governments that took place in the 1990s in a number of Eastern European countries (Bird, Ebel, and Wallich 1996). Similarly, in China local governments are responsible for such significant expenditures as pensions, unemployment insurance, disability, and minimum income support (Wong and Bird 2008).

Even clarity in expenditure assignment and assigning the “right” expenditures to the right government are not enough to ensure good results. There must also be both accountability, in terms of democratic accountability to the local population, and authority, in terms of the ability to manage expenditures and to determine (within limits) revenues. Both financial honesty and political accountability require that municipal budgeting, financial reporting, and auditing be not only comprehensive, comprehensible, comparable, and verifiable but also transparently public. In Brazil, for example, and increasingly in other countries, more and more local budgets and financial accounts are freely accessible on the Internet, and in some instances residents are actively encouraged to participate to some extent in developing the expenditure plans for their areas.³⁰

²⁹For detailed exploration of ways to structure PPP arrangements when this approach seems appropriate, see Engel, Fischer, and Galetovic (2010).

³⁰Participatory budgeting is the practice of including citizens in decisions on how the budget is formulated. Porto Alegre, Brazil, introduced the practice in 1989. It is now used by 180 municipalities in Brazil and many

A strong central hand may be needed not only, as Glaeser (2011) emphasizes, to provide such urban basics as safe streets and safe water but also to ensure that good rules are in place and are complied with, both for urban public finance and for such essentially private-sector activities as construction and vehicle use. For example, higher-level governments might establish a model “framework” local budget law and financial reporting system and require adequate external audit. Improving the local budgeting and financial system along these lines will satisfy two essential requirements of good government: (1) establish the basis for financial control; and (2) provide reasonably accurate, uniform, and timely financial information.

Improving local finance information is not a small matter. Improved accountability may be the key to improved public-sector performance, but improved information is the key to accountability. The systematic collection, analysis, and reporting of information that can be used to verify compliance with goals and to assist future decisions are critical to successful urban development. Such information is essential to informed local participation through the political process and to the monitoring of local activity by the central agencies responsible for supervising and (sometimes) financing such activity. Unless local “publics” are aware of what is done, how well it is done, how much it cost, and who paid for it, no local constituency for effective government can be created. Similarly, unless central agencies can monitor and evaluate local performance, there can be no assurance that functions of national importance will be adequately performed once they have been decentralized. Perhaps paradoxically, an important accompaniment of any successful program to strengthen urban local bodies must therefore be an improvement in national evaluation capacity. Decentralization and improved central evaluation and assessment of local activities are not substitutes; they are complements.

Another common problem is that cities have inadequate revenue tools to meet expenditure requirements. In India, as mentioned earlier, some states have at times simply abolished local taxes without providing adequate substitute sources of revenue to municipalities, as when Rajasthan and Haryana simply abolished the property tax without even consulting urban local governments. Similarly, Punjab, again with no consultation, raised the threshold for the property tax so high that almost two-thirds of the properties are exempt (Rao and Bird 2010).

Cities are often further encumbered by unfunded edicts and mandates issued by higher-level governments. In China, for instance, where local governments have substantial social expenditure responsibilities, they cannot set tax rates, change the bases of collection, or introduce new taxes. On the other hand, they often control substantial assets such as land, enterprises, and sometimes natural resources. In these circumstances, it is not surprising that China’s cities (and other local governments) have at times responded to fiscal pressures in a variety of undesirable ways. One is to accumulate arrears in wage payments to teachers and other employees,

countries in Latin America and elsewhere. Participatory budgeting was introduced, in part, as a way to address severe inequalities in services (especially water and sanitation) and quality of life (Abers 2001). However, experience suggests that such innovations work best when there is a good public financial system in place; they cannot replace such a system.

pension and unemployment insurance payments, and debt payments to suppliers such as utilities. Another is to exact fairly arbitrary payments under a variety of guises (fees, charges, and levies) from local businesses and residents.

Some countries have the opposite problem: instead of being required to spend money they do not have, local governments may be overdependent on intergovernmental transfers that are sometimes poorly designed (incentive perverse) and often, even worse from a local fiscal perspective, unreliable. As mentioned earlier, for example, when some Indian states abolished the local octroi, they promised to replace lost local revenues by state transfers. Unfortunately for local finances, the amount and timing of this transfer in most cases turned out to be more a matter of whim, it seemed, than of law.

Of course, not all problems of city finance are attributable to other governments. Some are definitely the fault of the local government. Both higher levels of government and outside observers have frequently, and critically, commented on the extent to which local governments fail to utilize adequately even those tax and fee powers that they have, in particular by failing to put forth an adequate collection effort. The “fiscal laziness” of subnational governments has been, for example, a common theme in the ongoing discussion of fiscal decentralization in Colombia, as well as in some other Latin American countries, although the empirical evidence of the existence and importance of this phenomenon is far from clear (Bird 2012).

The fragmentation of the governmental structure of metropolitan areas in many countries gives rise to other problems. For example, it is often both technically and politically difficult to make appropriate decisions on expenditures when benefits/costs spill over municipal boundaries, as has been the case with respect to some major aspects of urban development projects in Mexico City (Raich 2008). It can be equally difficult to provide local services in a coordinated and adequate fashion when higher-level governments persist in interfering in such detailed local issues as bus routes and the design of council buildings. How to share costs fairly within the metropolitan area is always and everywhere a controversial issue.

Different models of voluntary cooperation and special-purpose bodies have been used to address the fragmentation of governmental structure. In São Paulo, for example, the Inter-municipal Consortium of the Greater ABC Region was created in 1990 to coordinate economic development policies that had spillover effects across municipal boundaries (Arretche 2013). The Metropolitan Manila Development Authority was created in 1995 to perform planning, monitoring, and coordinating functions for the metropolitan area (but only if they do not diminish the autonomy of local governments on local matters) (Laquian 2002). These attempts at coordination have met with mixed success (Slack 2007a).

Sometimes, however, despite such problems, cities have managed to improve themselves. In Bangalore, for example, the local property tax was substantially reformed by revising the area-based values, introducing a self-assessment system, and improving the technology of the payments system with the result that revenue more than doubled in two years (Rao and Bird 2010). Properties were classified into different zones based on the guidance rental values per square foot set for each

zone on the basis of type and quality of construction and age of the buildings. These values were then made available online so that any property owners could compute their tax liabilities simply by plugging in the location, type of construction, and area of the property; they could then also pay their taxes online.³¹ The Bangalore experience suggests that such reforms work best when the system is simple and transparent enough to be easily understood by the general public and when there is both clarity in the reform process and thorough public discussion and debate when the reform is adopted. Online payment of the tax was also essential so that the taxpayer did not have to go to the tax department and face numerous hassles simply in order to pay the tax. Furthermore, by matching the properties paying the tax with those in the Geographical Information System (GIS), the government was able to identify and pursue many who were not paying the tax.

Finally, it is critically important to consider metropolitan finance in the context of the whole public policy system with respect to both metropolitan areas versus other municipalities and the relationship between the metropolitan city and the metropolitan region. As Burki, Perry, and Dillinger (1999, 24) put it, “A structure that fails to distinguish between major metropolitan areas and small villages makes it difficult to clearly define the functional responsibilities of local government.” The standard economic theory of local governments does not distinguish among large metropolitan areas, intermediate-size cities, or towns and villages. If all local governments are assigned the same responsibilities, either the assignment reflects what the smallest municipalities can provide or, more likely, those municipalities are unable to fulfill their assigned responsibilities. From any economic perspective, it is clear that different types of municipalities should be distinguished in terms of expenditure assignment: big cities can and should do more.

Government structure should adequately encompass the relevant metropolitan region. In addition, appropriate fiscal relationships are needed both between the metropolitan region and the rest of the country and within the region itself. It is important both to avoid unduly subsidizing (or taxing) large urban areas and to price scarce public resources (especially the use of space and public services) properly within such areas.

Metropolitan cities should be given more access to fiscal bases such as property and vehicle taxes and a good local business tax, as well as some access to other tax bases (income and sales taxes) when they are expected to play significant roles in financing expensive and expanding soft services such as health and education. Most important, because metropolitan regions should be essentially self-financing, they should generally have greater fiscal autonomy than other urban or rural areas in terms of both greater responsibility for local services and greater ability to levy their own taxes and charges.

³¹ A major weakness of this system is the need to revise the unit values periodically in keeping with changes in prices. In the absence of periodic revision, revenues will not respond to changes in the values of properties, and the buoyancy of the tax will depend only upon the addition of new properties. As a rule, it is politically difficult to change the values periodically. One way to overcome this problem might be to link these values automatically to an index of property values, as is done in Colombia, for example.

REFERENCES

- Abers, Rebecca. 2001. Learning democratic practice: Distributing government resources through popular participation in Porto Alegre, Brazil. In *The challenge of urban government: Policies and practices*, ed. Mila Freire and Richard E. Stren, 129–143. Washington, DC: World Bank.
- Acosta, Olga L., and Richard M. Bird. 2005. The dilemma of decentralization in Colombia. In *Fiscal reform in Colombia: Problems and prospects*, ed. Richard M. Bird, James M. Poterba, and Joel Slemrod, 247–286. Cambridge, MA: MIT Press.
- American Petroleum Institute. 2012. Notes to state motor fuel excise and other taxes. www.api.org/statistics/fueltaxes/upload/State_Motor_Fuel_Excise_Tax_Update.pdf
- Angel, Shlomo. 2011. Making room for a planet of cities. Policy Focus Report. Cambridge, MA: Lincoln Institute of Land Policy.
- Annez, Patricia. 2010. Financing Indian cities: Opportunities and constraints in an nth best world. Policy Research Working Paper No. WPS5474. Washington, DC: World Bank.
- Arretche, Marta. 2013. Governance and finance in two Brazilian metropolitan areas. In *Finance and governance of metropolitan areas in federal systems*, ed. Enid Slack and Rupak Chattopadhyay. Toronto: Oxford University Press.
- Bahl, Roy. 2002. Implementable rules of fiscal decentralization. In *Development, poverty and fiscal policy*, ed. M. Govinda Rao, 253–277. New Delhi: Oxford University Press.
- . 2009. *Property tax reform in developing and transition countries*. Washington, DC: U.S. Agency for International Development.
- . 2011. Financing metropolitan cities. In *Local government finance: The challenges of the 21st century*, ed. United Cities and Local Governments. Barcelona: United Cities and Local Governments.
- Bahl, Roy, and Johannes Linn. 1992. *Urban public finance in developing countries*. New York: Oxford University Press.
- Barter, Paul. 2010. Parking policy in Asian cities. Paper No. Lkyspp: 10–15. Singapore: Lee Kuan Yew School of Public Policy, National University of Singapore.
- Bird, Richard M. 1976. *Charging for public services: A new look at an old idea*. Toronto: Canadian Tax Foundation.
- . 2001. User charges in local government finance. In *The challenge of urban government: Policies and practices*, ed. Mila Freire and Richard E. Stren, 171–182. Washington, DC: World Bank.
- . 2003. A new look at local business taxes. *Tax Notes International* 30(7):695–711.
- . 2005. Getting it right: Financing urban development in China. *Asia-Pacific Tax Bulletin* 11(2):107–117.
- . 2006. Local and regional revenues: Realities and prospects. In *Perspectives on fiscal federalism*, ed. Richard M. Bird and François Vaillancourt, 177–96. WBI Learning Resources Series. Washington, DC: World Bank.
- . 2009. Tax assignment revisited. In *Tax reform in the 21st century*, ed. John G. Head and Richard E. Krever, 441–470. New York: Wolters Kluwer.
- . 2012. Fiscal decentralization in Colombia: A work (still) in progress. Washington, DC: World Bank.
- Bird, Richard M., Robert D. Ebel, and Christine Wallich. 1996. *Decentralization of the socialist state: Intergovernmental finance in transition economies*. Aldershot, U.K.: Avebury.
- Bird, Richard M., and Pierre-Pascal Gendron. 2001. Vats in federal countries: International experience and emerging possibilities. *Bulletin for International Fiscal Documentation* 55(7):293–309.
- Bird, Richard M., and Barbara D. Miller. 1989. Taxes, pricing and the poor. In *Government policy and the poor in developing countries*, ed. Richard M. Bird and Susan Horton. Toronto: University of Toronto Press.
- Bird, Richard M., and Enid Slack. 1993. *Urban public finance in Canada*. Toronto: John Wiley and Sons.

- . 2004. *International handbook on land and property taxation*. Cheltenham, U.K.: Edward Elgar.
- . 2007. An approach to metropolitan governance and finance. *Environment and Planning C: Government and Policy* 25(5):729–755.
- Bird, Richard M., and Almos Tassonyi. 2001. Constraints on provincial and municipal borrowing in Canada: Markets, rules, and norms. *Canadian Public Administration* 44(1):84–109.
- Bird, Richard M., and Thomas Tsiopoulos. 1997. User charges for public services: Potentials and problems. *Canadian Tax Journal* 45(1):25–86.
- Bird, Richard M., and Eric M. Zolt. 2005. Redistribution via taxation: The limited role of the personal income tax in developing countries. *UCLA Law Review* 52(6):1627–1695.
- Bordignon, Massimo, Silvia Gianni, and Paolo Panteghini. 2001. Reforming business taxation: Lessons from Italy? *International Tax and Public Finance* 8:191–210.
- Borero Ochoa, Oscar. 2011. Betterment levy in Colombia: Relevance, procedures, and social acceptability. *Land Lines* (April):14–19.
- Burki, Shahid J., Guillermo E. Perry, and William R. Dillinger. 1999. *Beyond the center: Decentralizing the state*. Washington, DC: World Bank.
- Chernick, Howard, and Andrew Reschovsky. 2006. Local public finance: Issues for metropolitan regions. In *Competitive cities in the global economy*, 417–432. OECD Territorial Reviews. Paris: Organisation for Economic Co-operation and Development.
- Connolly, Katrina, and Michael E. Bell. 2010. Financing urban government in transition countries: Assessment uniformity and the property tax. *Environment and Planning C: Government and Policy* 28(6):978–991.
- Daniere, Amrita G., and Jose A. Gomez-Ibañez. 2002. Environmental and communications infrastructure in Chile. In *Chile: Political economy of urban development*, ed. Edward L. Glaeser and John R. Meyer. Cambridge, MA: John F. Kennedy School of Government, Harvard University.
- Ebel, Robert D., and Serdar Yilmaz. 2003. On the measurement and impact of fiscal decentralization. In *Public finance in developing and transitional countries*, ed. Jorge Martinez-Vazquez and James Alm. Cheltenham, U.K.: Edward Elgar.
- Engel, Eduardo, Ronald Fischer, and Alexander Galetovic. 2010. The economics of infrastructure finance: Public-private partnerships versus public provision. *EIB Papers* 15(1): 40–69. Santiago, Chile: University of Chile.
- Florida, Richard. 2002. *The rise of the creative class*. New York: Basic Books.
- Fox, William F., and Tami Gurley. 2006. *Will consolidation improve sub-national governments?* Washington, DC: World Bank.
- Freire, Mila. 2001. Introduction. In *The challenge of urban government: Policies and practices*, ed. Mila Freire and Richard E. Stren. Washington, DC: World Bank.
- Gilbert, Guy. 2010. Beyond inter-municipal partnerships towards two-tier municipalities? Presentation at the 6th Symposium on Fiscal Federalism, Barcelona (June).
- Glaeser, Edward L. 2011. *The triumph of the city*. New York: Penguin.
- Glaeser, Edward L., and Joshua D. Gottlieb. 2009. The wealth of cities: Agglomeration economies and spatial equilibrium in the United States. *Journal of Economic Literature* 47(4):983–1028.
- Hermann, Zoltán, Tamás M. Horváth, Gábor Péteri, and Gábor Ungvári. 1999. *Allocation of local government functions: Criteria and conditions—analysis and policy proposals for Hungary*. Washington, DC: Fiscal Decentralization Initiative for Central and Eastern Europe.
- Jofre-Monseny, Jordi, and Albert Solé-Ollé. 2008. Which communities should be afraid of mobility? The effects of agglomeration economies on the sensitivity of firm location to local taxes. CESifo Working Paper No. 2311. Munich: Ifo Institute, Center for Economic Studies, and CESifo GmbH (May).
- Kim, Junghun, Jorgen Lotz, and Niels J. Mau. 2010. *General grants versus earmarked grants: Theory and practice*. Copenhagen: Korea Institute of Public Finance and Danish Ministry of Interior and Health.

- Kitchen, Harry M., and Enid Slack. 2006. Providing services to remote areas. In *Perspectives on fiscal federalism*, ed. Richard M. Bird and François Vaillancourt. WBI Learning Resources Series. Washington, DC: World Bank.
- Laquian, Aprodicio. 2002. Metro Manila: People's participation and social inclusion in a city of villages. In *Urban governance around the world*, ed. Blair A. Ruble, Richard E. Stren, Joseph S. Tulchin, and Diana H. Varat, 74–110. Washington, DC: Woodrow Wilson International Center for Scholars.
- Linn, Johannes. 1982. The costs of urbanization in developing countries. *Economic Development and Cultural Change* 30(3):625–648.
- Macón, Jorge, and José M. Mañón. 1977. *Financing urban and rural development through betterment levies: The Latin America experience*. Westport, CT: Praeger.
- Meltsner, Arnold J. 1972. *The politics of city revenue*. Berkeley: University of California Press.
- Ministry of Internal Affairs and Communications. *Local government finance in Japan* (2012). www.soumu.go.jp/english/pdf/lpfij.pdf
- Mushkin, Selma J., ed. 1972. *Public prices for public products*. Washington, DC: Urban Institute.
- Nowlan, David M. 1994. Local taxation as an instrument of policy. In *The changing Canadian metropolis: A public policy perspective*, vol. 2, ed. F. Frisken. Berkeley: Institute of Governmental Studies Press, University of California.
- OECD. 1999. *Taxing powers of state and local governments*. Paris.
- . 2006. *Competitive cities in the global economy*. Paris.
- Peterson, George E. 2009. *Unlocking land values to finance urban infrastructure*. Trends and Policy Options No. 7. Washington, DC: World Bank.
- Pethe, Abhay. 2011. Metropolitan public finances—the case of Mumbai. Unpublished manuscript.
- Raich, Uri. 2008. *Unequal development—decentralization and metropolitan finance in Mexico City*. Saarbrücken: VDM Verlag.
- Rao, M. Govinda, and Richard M. Bird. 2010. Urban governance and finance in India. Working Paper No. 2010–68. New Delhi: National Institute of Public Finance and Policy (April).
- Rao, M. Govinda, and Nirvikar Singh. 2005. *The political economy of federalism in India*. New Delhi: Oxford University Press.
- Rhoads, William G., and Richard M. Bird. 1967. Financing urbanization in developing countries by benefit taxation: Case study of Colombia. *Land Economics* 42(4):403–412.
- Richardson, Harry W. 1987. The costs of urbanization: A four-country comparison. *Economic Development and Cultural Change* 35(3):561–580.
- Rojas, Eduardo, Juan R. Cuadrado-Roura, and Jose M. Fernandez Guell, eds. 2008. *Governing the metropolis: Principles and causes*. Washington, DC: Inter-American Development Bank.
- Slack, Enid. 2002. *Municipal finance and the pattern of urban growth*. Toronto: C. D. Howe Institute.
- . (2007a). *Managing the coordination of service delivery in metropolitan cities: The role of metropolitan governance*. Washington, DC: World Bank.
- . (2007b). Grants to large cities and metropolitan areas. In *Intergovernmental fiscal transfers, principles and practice*, ed. Robin Boadway and Anwar Shah, 453–481. Washington, DC: World Bank.
- . 2011. The property tax . . . in theory and practice. In *IEB's world report on fiscal federalism '10*, 24–34. Barcelona: Institut d'Economia de Barcelona.
- Slack, Enid, and Richard M. Bird. 1991. Financing urban growth through development charges. *Canadian Tax Journal* 39(5):1288–1304.
- Slack, Enid, Larry S. Bourne, and Meric S. Gertler. 2003. *Vibrant cities and city-regions: Responding to emerging challenges*. Toronto: Panel on the Role of Government.
- Slack, Enid, and R. Chattopadhyay, ed. 2013. *Finance and governance of metropolitan areas in federal systems*. Toronto: Oxford University Press.
- Steytler, Nico. 2013. Governance and finance of two South African metropolitan areas. In *Finance and governance of metropolitan areas in federal systems*, ed. Enid Slack and Rupak Chattopadhyay. Toronto: Oxford University Press.