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Financing Large Cities and Metropolitan Areas[1]

Enid Slack

Abstract

Large cities and metropolitan areas differ from smaller urban or rural municipalities—they have much larger populations, higher concentrations of population, and populations that are more heterogeneous in terms of social and economic circumstances. Large cities are important generators of employment, wealth, and productivity growth, and 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. These characteristics have implications for the magnitude and complexity of the expenditures on municipal services that local governments in metropolitan areas are required to make, as well as their ability to pay for services. This paper explores the financing of services and infrastructure in large cities and metropolitan areas. Do large cities spend more than smaller cities? Do larger cities have greater fiscal capacity? Are large cities treated differently from other cities? What are the appropriate revenue sources for large cities?

Key words: local finance, international comparisons, metropolitan areas
JEL Classification: H70, H71, H77

1. An earlier version of this paper was presented at the 6th Symposium on Fiscal Federalism: Financing Local Governments, Barcelona, June 14–15, 2010. I am grateful to Richard Bird for comments on an earlier draft of this paper.

Financing Large Cities and Metropolitan Areas

According to economic theory, the major role assigned to local governments is to provide goods and services to residents within a particular geographic area who are willing to pay for them.[2] If the benefits of particular services are confined to local jurisdictions (that is, the actions of one municipality have no effect on other municipalities), efficiency is enhanced, because the mix and level of services can vary according to local preferences. Local officials are in a better position to respond to local tastes and preferences than are central government officials. This theory of the role of local governments, however, does not distinguish among different types of local governments—large metropolitan governments, intermediate-sized cities, or towns and villages. Yet they are different.

Large cities and metropolitan areas differ from smaller urban or rural municipalities for the obvious reason that they have a much larger population.[3] But they are also different because they have a higher concentration of population and a population that is more heterogeneous in terms of social and economic circumstances. Moreover, large cities are important generators of employment, wealth, and productivity growth. In the emerging global "knowledge-based economy," innovation is the key to prosperity and most innovation occurs in large cities and metropolitan areas where people enjoy the benefits of proximity, known as agglomeration economies (Slack, Bourne, and Gertler 2003). Large 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.

From a municipal finance perspective, the unique characteristics of large cities and metropolitan areas have implications for the magnitude and complexity of the expenditures that local governments in those areas are required to make on municipal services, as well as their ability to pay for services. Large cities and metropolitan areas can have greater fiscal autonomy than other urban or rural areas, both in terms of greater responsibility for local services *and* greater ability to levy their own taxes and collect their own revenues (Bird 1984). Yet in few

2. The literature on fiscal federalism assigns three roles to government: stabilization, income redistribution, and resource allocation. Stabilization policy is generally not considered an appropriate function of local governments, because they do not have access to monetary policy and because capital and labour flow freely across the boundaries of local jurisdictions. In the case of redistribution, local efforts to address income disparities will likely result in the movement of high-income groups to low-tax areas and low-income groups to high-tax areas. Nevertheless, local governments do engage in redistribution through the act of taxing and spending. (See Bird and Slack 1993, 16.)

3. Studies of metropolitan areas use different terms to describe them. These include, for example, metropolitan cities, metropolitan regions, city-regions, and urban regions. Generally, these terms refer to cities with a large urban core plus adjacent urban and rural areas that are integrated socially and economically with the core. See (Stren and Cameron 2005) for a discussion of how the various terms are applied in different parts of the world.

countries do large cities and metropolitan areas receive any different treatment from senior governments compared with any other municipality (Bahl 2010).

Municipal finance in metropolitan areas is further complicated by the existence of a multiplicity of local governments that provide services and raise revenues within a larger region. Because the political boundaries of individual local governments rarely coincide with the boundaries of the economic region,[4] there is a need to coordinate service delivery and share costs on a region-wide basis. This problem is exacerbated by overlapping special-purpose districts that are responsible for delivering specific services, such as water or electricity, the boundaries of which may not correspond to those of either local or regional governments.[5]

This paper explores the financing of services and infrastructure in large cities and metropolitan areas by posing a series of questions: Do large cities spend more than smaller cities? Do larger cities have greater fiscal capacity? Are large cities treated differently from other cities? What are the appropriate revenue sources for large cities?

1. Do Large Cities Spend More?

Local government expenditures are generally higher in large metropolitan areas than they are in other municipalities (Chernick and Reschovsky 2006; Freire 2001). A high concentration of people means, for example, more specialized police services; higher densities mean more specialized training and equipment for fire fighters. A high concentration of poverty and special needs within large metropolitan areas requires higher expenditures on social services, social housing, and public health. Moreover, large cities compete on the international stage; to be competitive, they need to provide services such as parks, recreational facilities, and cultural institutions in addition to the "hard" services such as transportation, water, and sewers. People from outside the metropolitan area make use of the cultural facilities (as well as social and medical services) but may not contribute directly to the support of those facilities.[6] By comparison, smaller cities may not have a public transit system, because the urban densities are not sufficient for a transit system to be economically viable. Nor do they usually support cultural facilities (such as opera houses or art galleries), because these facilities require a minimum population to make their provision possible.

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

5. Although finance and governance are closely intertwined, the issue of governance of metropolitan areas is not discussed further in this paper. For a discussion of metropolitan governance, see Slack (2007b) and Bird and Slack (2007).

6. Although non-residents do not pay property taxes to the municipality, they may pay indirectly through municipal parking charges, taxes on restaurant meals, etc. They may also pay taxes to other levels of government that may find their way back to the municipality in the form of intergovernmental transfers.

Net expenditures per capita in London, for example, were 48 percent above the average for England in 2008-09. Expenditures were higher on transport (147 percent above the average), housing (97 percent above the average), and police (88 percent above the average) (U.K. Department of Communities and Local Government 2010). Part of the explanation for higher expenditures results from differences in ethnic diversity (one in four Londoners is a member of an ethnic minority), income disparities (London has the second-highest unemployment rate among England's regions), and, of course, its role as a national capital and global city in terms of government, finance, and business services (Office of the Prime Minister 2003).

Not only are local government expenditures higher in large metropolitan areas compared with smaller cities and towns, but they are also higher in central cities compared with suburban areas. Municipal per-capita spending in the City of Toronto in 2008 was 50 percent higher than the average for both the Greater Toronto Area and the province of Ontario (Kitchen 2010). Higher overall expenditures are largely explained by higher expenditures on social services, fire and police protection, and transit. Similarly, municipal per-capita expenditures in the core city of Zurich are more than double those in its suburbs (Kübler and Rochat 2010). In particular, expenditures are higher for culture, security, social welfare, traffic, and health services.

At the same time, large central cities may benefit from lower expenditures per capita for metropolitan services to the extent that they can take advantage of economies of scale in service provision.[7] Empirical evidence on the existence of economies of scale is mixed, however, depending on the service in question and the units of measurement (e.g., jurisdiction size or size of the facility) (Fox and Gurley 2006; Hermann, Horváth, Péteri, and Ungvári 1999). Economies of scale can generally be found for central administrative and governance functions and for services with large capital inputs such as public transportation and water and sewage systems (Chernick and Reschovsky 2006), but it is less clear that economies of scale can be achieved for other services, such as education.[8] The literature also suggests that it is possible for cities to become too large to deliver services efficiently, at which point, diseconomies of scale can set in.

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

8. 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. Expenditures are not a good measure of costs, in part because the pattern of expenditures may reflect differences in local government wealth. That is, the local government fiscal base is likely to be correlated with population size (Hermann et al. 1999, 36), so that larger expenditures do not necessarily mean higher costs.

2. Do Larger Cities Have Greater Fiscal Capacity?

As with expenditures, revenue patterns tend to be different in large metropolitan regions compared with smaller cities, reflecting both the different nature and level of services they provide and their greater ability to levy taxes. To the extent that cities rely on property tax revenues, for example, larger, more densely populated cities have a larger per-capita tax base than smaller cities or rural areas because of generally higher property values. Since commercial and industrial properties are almost always taxed at a higher rate than residential properties (Bird and Slack 2004), large cities with a high proportion of commercial and industrial properties have a greater ability to levy property taxes. Moreover, the existence of agglomeration economies in large cities implies that more of the taxes on commercial and industrial properties come from economic rents. This means that one dollar of commercial assessment in a large city has more tax capacity than one dollar of commercial assessment in a smaller municipality.

Large cities and metropolitan areas also have greater ability to levy income and sales taxes because of the higher level of economic activity that they experience. Sales taxes generate significant revenues for large cities that attract people from neighbouring municipalities who come to shop or work. Indeed, sales taxes are one way to capture the benefits that commuters and visitors enjoy from using services in the municipality. At the same time, in large geographic areas it is easier to levy taxes over the broader region, reducing the likelihood that people will cross the municipal boundary to shop, for example.

Local revenues in central cities also tend to be higher than in the suburbs. In Toronto, for example, per-capita revenues are more than 50 percent higher in the city than in the suburbs, comparable to the differences in expenditures noted above (Kitchen 2010). Per-capita property taxes are somewhat higher than in the suburbs, as are user fees. Provincial conditional transfers are higher in the city, reflecting cost-sharing programs for social welfare. Finally, Toronto is permitted to levy additional taxes that are not available to the suburban municipalities, but these taxes do not bring in much additional revenue.

3. Are Large Cities and Metropolitan Areas Treated Differently?

Special financial arrangements for large metropolitan areas fall into three broad groups: city-state status, special taxing powers, and special intergovernmental transfers (Bahl 2010).

Tokyo is an example of a city-state in which the metropolitan government has both city and prefecture (state) status and, as a result, has greater taxing powers than other municipal governments in Japan. Similarly, the German structure gives broader responsibilities to "city-states" (Berlin, Bremen, and Hamburg) compared with other German cities. In addition to their *Land* (state) responsibilities such as education, security, and social policy, city-states perform the functions of a local government (transportation, housing, daycare, etc.) (Zimmermann 2009, 110). City-states also collect the same revenues as state governments and local governments (see the example of Berlin in Table 1).

In some countries, large cities have been granted additional taxing powers: for example, Toronto relies heavily on property taxes, but can also levy other taxes such as a vehicle registration fee, a land transfer tax, and a billboard tax (see Table 1). New York City levies a wider range of taxes than other U.S. cities and, in particular, corporate income and business taxes (see Table 1). London, however, levies only a local residential property tax (council tax).

A recent study of local governments in the United States found that the largest local governments raise just over 60 percent of their general revenues from own sources compared with less than 60 percent for all other local governments (Chernick, Langley, and Reschovsky 2010).[9] Governments in the largest U.S. cities rely much less heavily on property taxes than do local governments in the smaller municipalities: the property tax represents only 56 percent of tax revenue for the large cities compared with 77 percent for the smaller cities. The larger cities rely more heavily on the general sales tax, the individual income tax, selective sales taxes, and the corporate income tax compared with local governments in smaller municipalities.

Although one might expect large metropolitan governments to depend less heavily on intergovernmental transfers, this is not always the case. Metropolitan areas in some countries—for example, Stockholm, Paris, Madrid, and Lausanne—do not rely as much on intergovernmental transfers as smaller local governments do (Bahl 2010). Core municipalities in metropolitan areas in Eastern Europe, however, do rely heavily on intergovernmental transfers (Bahl 2010). For some capital cities (for example, Berlin, Bern, and Brussels), the federal government provides grants for specific services such as transportation, parks, or cultural facilities. In most capital cities, however, little additional compensation is provided (Slack and Chattopadhyay 2009).

4. What Are the Appropriate Revenue Sources for Large Cities?

In general, the revenue sources available to large cities and metropolitan areas should reflect the expenditure responsibilities they are required to undertake: according to the European Charter of Local Self-Government, "local authorities' financial resources shall be commensurate with the responsibilities provided for by the constitution and the law" (Article 9, Paragraph 2). Moreover, metropolitan areas are expected to be as self-sufficient as possible. This section reviews some funding options.

4.1 User Charges

Local governments should, wherever possible, charge directly for services (Bird 2001). Appropriately designed user fees allow residents and businesses to know

9. The authors used a concept which they refer to as "constructed" city governments for the largest local governments in the United States. They compiled a measure of total taxes and other revenues paid by taxpayers for each large city by including revenues collected by the municipal government and the overlapping portion of the independent school districts and county governments.

Table 1: Local Taxes in Four Cities

Berlin	Toronto	New York	London
Land taxes and tax shares:	***Local taxes:***	***Local taxes:***	***Local taxes:***
Share of corporate income tax	Property tax	General property tax	Council tax (residential property tax)
Share of capital income tax	Land transfer tax	General sales tax	
Real estate transfer tax	Vehicle registration tax (repealed in 2011)	Personal income tax	
Motor vehicle tax	Billboard tax	General corporation tax	
Inheritance tax		Commercial occupancy tax	
Tax on betting and lotteries		Banking corporation tax	
Fire protection tax		Utility tax	
Beer tax		Unincorporated business tax	
Land plus local shares:		Real property transfer tax	
Personal income tax		Mortgage recording tax	
Business tax		Tax audit revenues	
Local taxes:		Cigarette tax	
Real estate tax		Hotel tax	
Entertainment tax			
Dog tax			
Second home tax			

how much they are paying for the services they receive from local governments. When appropriate prices are charged, governments can make efficient decisions about how much of a service to provide and citizens can make efficient decisions about how much to consume. User charges are especially appropriate for services such as water and public transit, the benefits of which are confined largely to individual consumers.

User charges are especially important in large metropolitan areas, because they encourage more efficient land use. If marginal cost pricing is used, higher fees are charged to consumers who live at a distance from existing services and are hence more costly to serve, and lower fees are charged to consumers who are closer. Uniform pricing of urban services, while often politically appealing, is inherently economically inefficient. Under-pricing and distortions in water and sewer pricing can result in severe locational distortions, for example. An additional important benefit of more appropriate pricing of urban services is to reduce pressure on urban finances indirectly by reducing the apparent need for more investment in underpriced infrastructure.

Recommendations to increase reliance on user charge financing are usually dismissed with the argument that the results are too regressive to contemplate. In reality, almost the opposite is true in large urban areas: those who benefit most from underpriced 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, can often deal adequately with any remaining perceived inequity from introducing more appropriate pricing systems.[10]

4.2 Taxes

The traditional theory of fiscal federalism prescribes a very limited tax base for local governments. The only “good” taxes are said to be those that are easy to administer locally, that are imposed mainly on local residents, and that do not raise problems of harmonization or competition either horizontally (between local governments) or vertically (between local and central governments). The following sets out some tax options.

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 to a lower-tax jurisdiction when it is taxed. Second, there is a connection between the types of services funded at the local level and the benefit to property values. To the extent that the property tax approximates the benefits received from local services, it functions like a benefit tax. Residential property taxes are particularly appropriate to fund local governments, because they are paid by local residents.[11] That is, those who enjoy the benefits of local services are required to pay for them.

The non-residential portion of the property tax—generally the most important part of the tax in many countries—is, however, less appropriate for financing local government expenditures (Bird, Slack, and Tassonyi 2010; Slack 2010). 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 with this tax—those bearing the burden of the tax are not necessarily the same as those enjoying the benefits. To the extent that such taxes exceed the benefits received by business from local government activities and are exported to residents of other jurisdictions, restrictions may be needed, such as a maximum rate or at least a requirement that a uniform rate be levied on residential

10. For extensive discussions of local user charges, see Bird and Tsiopoulos (1997).

11. For a more accurate and more detailed discussion of property tax incidence, see Bird and Slack (1993).

and non-residential property. As noted earlier, however, the existence of agglomeration economies means that larger cities have rents they can exploit to some extent by taxing non-residential property more heavily than residential property and much more heavily than non-residential property in smaller places.

Despite their many virtues as a source of local revenues, property taxes restrict revenue flexibility, because no country seems to be able to raise more than 10 percent of total tax revenues from the property tax (OECD 2006). That is partly because the tax is relatively costly and difficult to administer properly, and these problems are exacerbated as the size of the tax burden increases. Moreover, in most countries even a well-administered local property tax cannot finance major social expenditures (education, health, social assistance). Local governments financed primarily by property taxes must either confine their activities to providing such local services as street cleaning and garbage removal or depend heavily on transfers from senior levels of government. Finally, property tax revenues respond less quickly to changes in the economy than taxes on income or sales, because economic growth is not capitalized fully into real estate investment and land ownership. Moreover, in many countries, even if property values do increase, assessed values are not updated on a regular basis (Bird and Slack 2004).

Income Tax

A strong case can be made for a local income tax to supplement property taxes for large metropolitan areas. Even within the largest metropolitan areas, however, it is probably desirable to "piggyback" the local income tax onto higher-level income taxes (that is, to levy the tax as a supplement to a central or provincial/state income tax) rather than to impose local income taxes separately.

A metropolitan income tax can be justified on the grounds that governments in large metropolitan areas are increasingly being called upon to address issues of poverty, crime, land use planning, regional transportation, and other region-wide 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 the likelihood that people will change jurisdictions in response to tax differentials is lower in a larger geographic area, large metropolitan areas are better able than other local governments to take advantage of income taxes.

A different justification for income taxes for large metropolitan areas might be on benefit grounds. Since the residential property tax is tied to the consumption of housing rather than the consumption of public goods, even 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, however, in all likelihood income is more highly correlated with consumption of public services than it is with property value.

Because income taxes increase or decrease in response to changes in wages and salaries, revenues respond immediately to changes in the economy. This responsiveness of income taxes to changes in the local economy represents an advantage for cities that levy income taxes in an economic boom, but may become a problem in an economic downturn.

Sales Tax

General sales taxes are generally levied by state and provincial governments, but some local jurisdictions in the United States levy a retail sales tax (Due and Mikesell 1994). As long as municipal services are funded only from property taxes imposed on local residents, some users might escape paying taxes for services consumed. Broadening the local tax base to include sales would help to address some of the externalities in municipal services (whereby some beneficiaries of municipal services, such as commuters and visitors, do not pay for them), give municipalities greater flexibility and breadth in determining their own tax structure, and allow municipalities to benefit from growth in the economy. A sales tax is also preferred to an income tax because, unlike the income tax, it does not tax savings.

Nevertheless, evasion problems can erode the tax base as well as creating economic distortions. Large rate differentials between neighbouring 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, helps cities avoid many of the problems associated with a local sales tax, including high administrative and compliance costs.

Selective Sales Taxes

Taxes on automobiles—such as fuel taxes, vehicle registration levies, parking fees, and tolls on major roads—both discourage road use and produce revenues. The most important tax on automobiles from a revenue perspective is the fuel tax, which is also the simplest and cheapest tax to administer. Fuel taxes can generally be levied at the regional level. Moreover, different regions could impose taxes at different rates if they chose to do so, since they would probably not differ much from the rates imposed by their neighbours, given the mobility of the tax base. Cities that levy a fuel tax generally piggyback onto state/provincial fuel taxes, principally because the administrative costs of levying their own taxes are prohibitive. The revenues generated from these taxes are often earmarked for local roads and transit services.

Fuel taxes, however, are at best a crude instrument when used to pay for publicly provided transit services or to reduce externalities (congestion and pollution). Tolls and an appropriate set of annual automobile and driver licence fees are preferable. For example, vehicle fees may be based on such features as vehicle 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 to 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 have been used successfully, for example, in Singapore and London.

Business Tax

Many countries have regional and local business taxes in the form of corporate income taxes, capital taxes, non-residential property taxes, transit taxes (*octroi*), licence fees (*patente*), and various forms of industry and commerce taxes (Bird 2003). Most of these taxes, however, do not meet the criteria for "reasonableness." Few are equitable. Almost none are neutral. Most accentuate the disparities between localities, giving most to those who have most—although this feature may, of course, make them especially attractive to large metropolitan areas. Most also lend themselves to tax exporting, thereby violating the correspondence principle—that is, those who pay should be those who benefit. These taxes also tend to be costly to administer.

Nonetheless, local governments generally impose taxes on local business. Such taxes are popular with officials and citizens for several reasons. They often produce substantial revenue and are more responsive to economic growth than property taxes. Moreover, in many countries, local governments have more discretion over the rate, base, and application of such taxes than they do over any other form of taxation. Since it is difficult to estimate the incidence of business taxes, it is easy to claim that they are paid by someone other than local residents, which makes them politically palatable.

There is a good economic case for local business taxation as a form of generalized benefit tax. Specific public services benefiting specific businesses should be paid for by appropriate user charges, but where user charges are not feasible, some form of broad-based, general levy on business activity may be warranted. This argument calls for a broad-based levy that does not tax any one input as does a tax on labour (payroll tax) or capital (differential property tax or corporate income tax), but rather is neutral to factor mix. A value added tax is likely the best form of local business tax (Bird 2003). Such a tax exists in Italy (Bordignon, Gianni, and Panteghini 2001), was adopted in 2004 in Japan, came into effect in 2010 in France, and has been proposed in South Africa.

4.3 Intergovernmental Transfers

As noted earlier, large cities and metropolitan areas have a greater ability to levy and collect their own revenues than smaller cities, and, as a result, less need to rely on grants from senior levels of government. Grants to large cities and metropolitan areas should thus probably be less on a per-capita basis than grants to smaller and rural municipalities. There will still be cases, however, in which some intergovernmental transfers are needed for large cities and metropolitan areas that provide services the benefits of which spill over municipal boundaries (Slack 2007a). In large metropolitan areas, some externalities can be internalized within the jurisdiction if municipal boundaries are extended to include all users of the service. Nonetheless, for services that generate externalities beyond the borders of the metropolitan area—for example, services that clearly contribute to international competitiveness—some transfers may still be appropriate.

On the whole, 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 no reason why the wealthiest regions (including large metropolitan areas) 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 education and health. To reduce their present dependence on intergovernmental transfers, not only do large metropolitan areas need an appropriate governing structure, but they also as a rule need more and different revenue sources compared with other local governments.

4.4 Financing Infrastructure

Municipal 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, they 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 should generally be financed locally, and often by borrowing. Other ways to pay for infrastructure include development charges and public-private partnerships.

Borrowing

Borrowing is an appropriate way to pay for capital expenditures. Where the benefits of a capital investment (for example, 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, large metropolitan areas tend to have greater access to bond markets than smaller municipalities and generally pay lower servicing costs.

Borrowing allows a municipality to enjoy the immediate benefit from the capital improvement, not always possible when it must rely only on current revenues (taxes and user fees), which are usually insufficient to fund large expenditures on a "pay-as-you-go" basis. The pattern of capital expenditures is lumpy and this means that a municipality may find it needs substantial funds to finance an infrastructure project one year and then the need declines for a few years. Borrowing allows municipalities to avoid large year-to-year fluctuations in tax rates.

The main disadvantage of borrowing from a municipal perspective is that some portion of revenues must be dedicated to debt repayment and are thus not available for other uses. When the costs are spread over time, a significant portion of local budgets becomes a fixed obligation and debt charges can constrain local fiscal flexibility. A municipality with low debt has more flexibility to respond to unanticipated events.

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 municipality, 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 that "growth should pay for itself" and not be a burden on existing taxpayers.[12]

Who ultimately pays development charges—the new buyer, developers, or pre-development landowners—depends largely upon the demand and supply conditions in the market for new housing (Slack and Bird 1991). Over the long term, however, it seems likely that most charges imposed for new housing developments are borne by buyers. If properly implemented, such development charges can act, in effect, as a form of marginal cost pricing and hence induce more efficient development patterns and discourage urban sprawl (Slack 2002). To do so, however, charges have to be differentiated by location to reflect the different infrastructure costs.

Public-Private Partnerships

Public-private partnerships (known as P3s) are arrangements between a government body and a private-sector party in which the private sector provides infrastructure or services that have traditionally been delivered by the public sector. P3s do not necessarily mean full privatization; the government body retains ownership of the assets and sets the policies and level of service. P3s are widely used in the United States and Europe, prompted by an interest in improving the efficiency and effectiveness of local public service delivery.

One of the main advantages of partnerships is that, by relieving municipalities of the financial responsibility for up-front capital costs, they enable the construction of infrastructure at times when government funding is constrained (Tassonyi 1997). Since many municipalities prefer not to borrow or are unable to borrow, P3s are one way to get facilities built without the municipality's having to incur debt. The operation of facilities and programs by private operators also reduces municipal operating expenditures and may enable additional sources of revenue to be collected. Ancillary uses such as retail can be accommodated within certain facilities (such as recreational centres) to provide further sources of revenue. Finally, the public sector can draw on private-sector experience and skill in project management.

There are, nevertheless, potential risks associated with public-private partnerships (Tassonyi 1997). For the private sector, there are risks that the

12. Many other levies may be imposed on developers: land dedications that require the developer to set aside land for roadways, other public works, school sites, or for environmental reasons; parkland dedications that require a portion of the land used for development to be set aside for parkland or a cash payment in lieu of parkland to be made; density bonusing, under which developers are granted higher densities than normally permitted in return for meeting conditions such as providing day care, preserving a historic building, etc.; connection fees to permit developers to draw on existing 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.

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. The success of a partnership depends on how the contractual arrangements are structured and how the risks are shared.

5. Concluding Comments

Large cities and metropolitan areas are often not treated any differently from smaller cities and towns—but they should be. Metropolitan regions can and should be essentially self-financing through user fees and taxes. Appropriate pricing through user fees will result in the efficient allocation of resources. The property tax is a suitable tax for local government, but, given that it is relatively inelastic, highly visible, and politically contentious, it is insufficient to fund the complex and increasing demands on governments in metropolitan areas. Access to a portfolio of taxes would provide stability (through the property tax) and elasticity (through income, sales, or business taxes).

Grants to large cities and metropolitan areas should probably be less on a per-capita basis than grants to smaller municipalities, but may still include transfers for health and education and other services, the benefits of which spill over municipal boundaries. Finally, metropolitan governments should use a combination of borrowing, development charges, and public-private partnerships to finance infrastructure.

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