

## **Local and Metropolitan Finance**

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## Local and Metropolitan Finance

Sources of revenue used by local and metropolitan governments around the world tend to be dominated by user fees, taxes and grants from senior levels of government. Much smaller sums of revenues come from issuing permits and licences, collecting revenue from fines and penalties, and so on. While the latter may be important at the margin for many municipalities, they are not discussed in this paper.

This paper concentrates on an examination and evaluation of the three major revenue sources. Furthermore, the evaluation is directed at annual operating revenues rather than capital investment. The latter is the subject of another paper in this series.

Part A describes the analytical model used to evaluate when and where each of the above mentioned revenue sources should be used. Part B takes the analytical model from part A and discusses the application of user fees: first, by indicating how user rates should be set when it may not be possible to calculate marginal cost; when economies of scale are prevalent; when capacity constraints are a reality; when demand differs in peak and non-peak periods; when distance from source of supply affects costs; when second-best considerations are a reality; and when externalities exist. This is followed by a discussion of how these fees should be applied to a range of municipal services. The section concludes with a discussion of whether user fees should be regulated.

Part C highlights a number of features of local taxation in federal and unitary countries that are part of the Organization for Economic Cooperation and Development (OECD). This section briefly outlines the taxes that are available to local governments along with their relative importance in each country. This is followed by a discussion of the fiscal autonomy and discretion that local governments have over their tax base and rate structure. The section concludes by examining a number of issues in local taxation.

Part D looks at the merits and potential problems if local and metropolitan governments rely heavily on grants from senior levels of government. Part E discusses the fiscal sustainability of municipalities and Part F summarizes the findings.

### A. Analytical Model

To set the stage for evaluating municipal revenues, let us turn to the constitutional place of local and metropolitan governments in most countries, especially in federal jurisdictions.<sup>1</sup> Local and metropolitan governments are ‘creatures of the state’ and may be viewed as agents of a senior level of government in the principal-agent framework of intergovernmental financial arrangements. The role of the agent in financing local public services, then, is best completed within the benefits-based model of public finance.<sup>2</sup>

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<sup>1</sup> Harry Kitchen (2001), “Models of Decision-Making and Collaboration for Local Governments in Federal Systems”, mimeograph, 38 pages.

<sup>2</sup> For an excellent discussion of the benefit model of local finance, see Richard M. Bird, “Threading the Fiscal Labyrinth: Some Issues in Fiscal Decentralization” (1993), vol. XLVI, no. 2, *National Tax Journal*, 207-227.

The underlying principle of the benefit model is simple - those who benefit from municipally funded services pay for them.<sup>3</sup> Economic efficiency is achieved when the user fee, price or tax per unit of output equals the extra cost of the last unit consumed. This is the well-known price equals marginal cost pricing principle. Charges applied in this fashion are efficient for funding services where the beneficiaries can be clearly identified and the costs correctly derived. Prices or taxes ration output to those who are willing to pay and signal suppliers (local governments or their delivery agents) quantity and quality of output desired.

Accountability is more likely to be present when there is a close link between consumption and the price or tax paid per unit of consumption. This will also lead to increased transparency as long as citizens/taxpayers have access to information on the way in which local taxes and user fees are set. Increased transparency will lower the risk of corruption by public sector policymakers.

Fairness within the benefits model is achieved because those who consume public services pay for them, just as someone who benefits from purchasing milk or a movie ticket pays for it. Concerns about the tax burden on lower income individuals should be addressed through income transfers from senior levels of government and social assistance programs targeted to individuals in need. It is far more equitable and efficient to handle income distribution issues through income transfers or targeting<sup>4</sup> than to tamper with charging or taxing mechanisms.

The benefits model, then, is most easily approximated where beneficiaries can be identified easily; where services do not generate spillovers or externalities; where the services are not income redistributive in nature;<sup>5</sup> where individuals can be excluded from consuming the service; and where precise measurement of output and costs can be calculated.

### *A.1 Application to Local and Metropolitan Finance*

Application of the benefits based model to the municipal sector steers us in certain directions. At the outset, it should be noted that local governments in most countries supply a range of services – from those that exhibit mainly private goods characteristics (water, sewers, solid waste collection and disposal, public transit, public recreation and so) to those that exhibit mainly public goods characteristics<sup>6</sup> (local streets and roads, street lighting, neighbourhood parks, etc.) to those that exhibit a mix of public and private good characteristics (fire and police protection, for example).

For services with mainly private good characteristics, individual beneficiaries can be identified, income redistribution is not a goal, spillovers are unlikely to exist, and operating

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<sup>3</sup> A more detailed discussion of the criteria mentioned here is found in Harry Kitchen (2004), “Financing Local Government Capital Investment”, at 7-9, another prepared for this workshop.

<sup>4</sup> For a discussion of these programs, see Robin Boadway and Harry Kitchen, *Canadian Tax Policy*, third edition (Toronto: Canadian Tax Foundation, 1999), chapters 8 and 9.

<sup>5</sup> While some elements of income redistribution are inherent in almost all public services, income redistributive services include welfare payments, children’s aid, social housing and income transfers to name the most obvious.

<sup>6</sup> For a discussion of ‘public’ versus ‘private’ goods, see Harvey S. Rosen, Paul Boothe, Bev Dahlby and Roger S. Smith (1999), *Public Finance in Canada*, (McGraw-Hill Ryerson), chapter 7.

costs can be measured and recorded. Here, a user fee would be the best financing instrument for satisfying the principles of efficiency, accountability, transparency, and fairness.

For services providing mainly collective or ‘public goods’ benefits (specific beneficiaries cannot be identified), user fees are inappropriate. Instead, these should be funded from a local tax on residents (or exported to the same extent services are) with necessary adjustments through the use of grants to account for spillovers; that is, benefits from these services that spill over into neighbouring communities should be funded from something other than a local tax.

For services that are partially private and partially public, a combination of user fees and local taxes may be appropriate.

Grants from senior levels of government may also have a role in funding local services. Specifically, conditional grants could be used for partial or full funding of services generating spillovers and for services in which the state has an interest (to ensure uniform or minimum standards, for example). Unconditional grants play a role in filling the fiscal gap (mismatch in local own source revenues and expenditure responsibilities) and in supporting municipalities in their attempts to provide comparable levels of service for comparable tax rates (equalization).<sup>7</sup>

Within this benefits based model of local and metropolitan finance, there is a role for local taxes, just as there is a role for local user fees, and grants from senior levels of government. Local and metropolitan governments, however, should not have to fund programs specifically directed toward the redistribution of income among individuals (social services and social housing, for example) nor should they be responsible for funding services that are national or state-wide in their impact and scope (education and health, to name two). These functions are more appropriately the responsibility of central and state governments and should be funded by them.

## **B. User Fees**

Where user fees are employed, they range from fixed charges unrelated to consumption to charges that vary directly with the quantity consumed, or a mix of fixed and variable charges. In addition, the fee structure may be designed to cover all or only a portion of real production and delivery costs. As well, the current application of user fees in most countries is designed to raise revenue rather than to serve as a rationing and/or demand signalling instrument. By not pricing properly, local governments generate some implicit income redistribution that is neither planned nor desired. For example, the tendency to charge a fixed price for water, regardless of volume consumed, on the premise that fixed income earners (seniors and poor) could not afford to pay the charge provides an implicit subsidy for higher income households with larger lawns to water and more cars to wash.

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<sup>7</sup> Robin W. Boadway and Paul A.R. Hobson (1993), *Intergovernmental Fiscal Relations in Canada* (Toronto: Canadian Tax Foundation), chapter 3.

Opposition to user fees tends to be wide spread across taxpayers and local government officials but not among public-policy analysts. Generally, this opposition arises because user fees are alleged to be regressive (that is, they absorb a higher percentage of lower income individuals' or households' income when compared with higher income individuals or households), but so is the price of milk and movie tickets. In some cases, they are resisted because cost data are not collected and recorded in a way that permits an estimation of marginal costs. This is supposedly a problem with fixed costs or where there are joint costs with other services such as in assigning general government expenses to individual services. There is often political and sometimes, administrative reluctance to introduce new user fees or alter existing fee structures that have been around for some time.

### ***B.1 How Should User Fees Be Set?***

In principle, allocative efficiency is achieved if the fee per unit of output equals the extra cost of producing the last unit; that is, price equals marginal cost. In practice, the kinds of services for which local and metropolitan governments are responsible may have to deviate from the straight-forward price equals marginal cost principle. For example, how should user fees be set when marginal cost is not calculated; when economies of scale are prevalent; when capacity constraints are a reality; when demand differs in peak and non-peak periods; when distance from source of supply affects costs; when second-best considerations are a reality; and when externalities exist.<sup>8</sup>

#### ***1. If Marginal Costs Are Not Calculated?***

If marginal costs are not calculated either because the data are not available in a form that permits this calculation or if the equating of marginal cost to price generates a financial loss (as it would if marginal cost were lower than average cost), one solution is to set price equal to average cost (every municipality knows average cost). Average cost pricing simply takes the total cost and divides it by the number of units currently produced to obtain the price. A positive feature of this approach is that prices are easier to calculate especially if only financial costs are considered as is usually the case.

Average cost pricing produces some important differences when compared with marginal cost pricing, however. If average cost is declining, too little of the good is provided and the price is too high. If average cost is rising, too much of the output is produced and the price is too low. In either case, an inefficient level of output results. Only if marginal and average costs are constant (the same regardless of the level of output) will average cost generate the

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<sup>8</sup> For more detail, see Richard M. Bird (2001), "User Charges in Local Government Finance", in *The Challenge of Urban Government: Policies and Practices*, edited by Mila Freire and Richard Stren (Washington: The World Bank), 171-182; Richard M. Bird and Thomas Tsiopoulos, (1997) "User Charges for Public Services: Potential and Problems", *Canadian Tax Journal*, Vol. 45, Number 1, 25-86; Harry Kitchen (1997), "Pricing of Local Government Services" in *Urban Governance and Finance: A Question of Who does What*, edited by Paul A.R. Hobson and France St-Hilaire (Montreal: The Institute for arch on Public Policy), 135-68; Harry Kitchen (2002), *Municipal Revenue and Expenditure Issues in Canada* (Toronto: Canadian Tax Foundation), chapter 6; and Don Dewees (2002), "Pricing Municipal Services – The Economics of User Fees", *Canadian Tax Journal*, vol. 50, NO. 2, 586-599.

efficient level of output. In spite of potential efficiency losses, average cost pricing is the most common practice.<sup>9</sup>

Average incremental cost pricing is a variant of average cost pricing.<sup>10</sup> Like marginal-cost pricing, it attempts to calculate the cost of providing the service to an additional user, but the calculation in this case is an easier one for public sector managers to estimate. Briefly, the calculation divides all of the additional costs associated with providing an increased level of service by the anticipated number of additional users. Each user is charged the average of the incremental total costs. This approach does not amount to marginal cost pricing in the strict sense, which refers to the additional cost for each user, but for many services, it may be as close as one can get in practice.

## ***2. If Economies of Scale Exist?***

If economies of scale<sup>11</sup> are prevalent, equating price to marginal cost results in annual operating losses. This loss has to be subsidized by other local revenues - a solution that for political reasons is unlikely to be adopted and almost certain to be allocatively inefficient, since the subsidy will likely come from taxes that create distortions elsewhere.

A feasible alternative in many instances – one that is both economically efficient and politically acceptable – involves adopting a two-part tariff. In its simplest form, the tariff consists of a variable charge equal to the marginal cost of the last unit consumed and a fixed charge or subscription fee for the privilege of using or gaining access to the service. The variable charge, if correctly set, ensures that the level of consumption is efficient (or as close to it as possible), and the fixed charge provides enough revenue to cover the fixed costs without distorting consumption choices. A two-part tariff is common for telephone, gas, and electric services in North America at least. More complicated versions include more than two pricing variables. Multi-part pricing policies are used for local utility services, since they have substantial fixed production costs and declining average and marginal costs.

## ***3. If Capacity Constraints Exist?***

Capacity constraints arise when the service provided by a given infrastructure is limited. If capacity is uneven and can be expanded only in discrete amounts, marginal-cost pricing will typically lead to under or overprovision relative to the efficient level. Here, when consumption presses on capacity, the price should be raised to allocate the limited supply efficiently. This approach justifies a price above short-run marginal cost whenever consumption is at or close to capacity. Peak-load pricing (see next topic), time of use pricing, and seasonal pricing are mechanisms to implement this approach and to provide enough revenue to help cover fixed costs.

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<sup>9</sup> Kitchen (2002), supra footnote 8, at 126-127.

<sup>10</sup> Bird (2001), supra footnote 8, at 176.

<sup>11</sup> A natural monopolist is often depicted by local utility type services (water, sewers, natural gas where it is a municipal responsibility). Their predominant characteristic for analytical purposes here is that they exhibit decreasing per unit costs over the entire range of output (economies of scale).

Although generally more difficult to implement, there is another approach to setting prices above marginal cost to fund fixed costs. Since prices will be too high, consumption will be less than its desirable level. The lost satisfaction from reduced consumption can be minimized if there are several classes of consumers, by raising the price the most for those whose demand is most inelastic, meaning that they will not reduce their consumption much in response to high prices.<sup>12</sup>

#### ***4. In Peak Periods?***

Efficient pricing calls for higher fees in peak periods and lower fees in off-peak periods. This arises because peak demand strains capacity and only lasts for a fraction of the demand cycle. The marginal benefit to peak users occurs over only a portion of the demand cycle, whereas the marginal cost of capacity expansion is incurred over the entire demand cycle which means that the marginal benefit to peak users exceeds their marginal costs. In addition, since off-peak users gain no additional benefit from capacity expansion, the additional capacity costs should be shouldered entirely by peak users. In other words, the off-peak price should be set equal to marginal operating costs while the peak price should be set equal to the sum of marginal capacity and operating costs.

#### ***5. If Distance from Source of Supply Affects Costs?***

The marginal cost of some services increases with distance from the source of supply. If the unit price or user fee does not vary to reflect this circumstance, users with lower marginal costs subsidize users with higher marginal costs. If this subsidy is capitalized into land values, the properties that are farthest from the source will be priced higher than would otherwise be the case. One way in which to prevent this outcome is to impose zone charges or differential fees on customers in remote or more expensive areas.

#### ***6. If Second Best Considerations Exist?***

Second-best considerations arise if prices elsewhere in the system are inefficient – that is, different from the marginal social cost. This situation arises, for instance, if a municipality exacts a user fee for a particular service, such as public transit, but does not apply a specific charge to substitutes for that service, such as roads or expressways. Roads and expressway users pay nothing to the municipality for each trip taken, whereas transit users are charged for each trip. In this instance, the municipality may be able to improve efficiency by setting the price in the controllable sector, public transit, below the marginal cost, in the hope of stimulating an increase in the use of transit services and a concomitant decrease in the use of roads and expressways (the uncontrollable sector). This pricing strategy is known as a ‘second best’ solution – a solution that one adopts when the most efficient solution is impractical.<sup>13</sup>

#### ***7.If Externalities Are Prevalent?***

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<sup>12</sup> This is known as ‘Ramsay Pricing’. See Jeffrey Church and Roger Ware (2000), *Industrial Organization: A strategy Approach* (Boston: Irwin-McGraw Hill), chapter 25.

<sup>13</sup> Robin Boadway (1997), “The Role of Second Best Theory in Public Economics”, in B. C. Eaton and R. G. Harris, *Trade, Technology and Economics: Essays in Honour of Richard G. Lipsey*, 3-25.

Finally, the presence of externalities or spillover benefits that accrue to non-residents may warrant the subsidization of some services. Much of the capital and social infrastructure in a municipality benefits residents and non-residents alike, and user fees or charges collected from local citizens may be less than the full marginal social cost of providing that infrastructure. Although it is possible to impose user fees on non-residents as well, these fees may not capture capacity costs appropriately. The standard recommendation in this case is to subsidize the cost of provision from grants from senior governments or revenues collected outside the local community. The subsidy rate should equal the share of benefits that accrue to non-residents.

## ***B.2 For What Services?***

User fees should be adopted wherever possible for financing metropolitan and local services. In general, it makes considerable economic sense to fund all water and sewer systems in this way, solid waste collection and disposal, public recreation, public libraries, public transit and parking. Major highways and arterial roads into and out of cities and large metropolitan areas could be financed from tolls or congestion charges (user fees). Their recent introduction in London, England could serve as a model for this purpose. A brief description of their application to some local services is described below. For all of these services, the arguments are the same for local responsibility as they are for metropolitan responsibility.

### ***1. Water Supply and Sewage Treatment***

User fees for water tend to be characterized by four structures. First, a fixed charge that does not vary with consumption but may vary by customer class (residential versus commercial) and property type (number and type of rooms, size of lot, number of water using fixtures, and so on). Second, three volume based charges are used - constant unit rate, declining block rate, or increasing block rate. A constant unit rate is an identical charge per unit of consumption (cubic metre, for example) and does not differentiate amongst customer classes.

A declining block rate structure generally includes a basic or fixed service charge per period combined with a volumetric charge that decreases in blocks (discrete steps) as the volume consumed increases. Typically, one or two initial blocks cover residential and light commercial water use, with subsequent blocks levied on heavy commercial and industrial uses. The fixed component of the charge often varies with the size of the service connection. Minimum charges corresponding to a minimum amount of water consumption in each billing period are common in these systems. Declining block rates are generally not preferred by conservationists because they do not capture the social costs associated with water consumption. An increasing block rate structure, which is used in very few municipalities, is similar to the decreasing block rate structure except that the volumetric charge increases in steps as consumption increases and there is no minimum charge.

Sewage collection and treatment expenses are almost always recovered through surcharges on water bills. For residential and most commercial/industrial customers, these rates are not based on sewage flow. Flat rate charges are the most common type. Not only are these used in municipalities with flat rate water charges, but they are also used in municipalities with

metered water rates. For other municipalities, the sewage charge is a percent of the water bill.

Although the efficiency advantages of marginal cost pricing are well documented, municipalities seldom implement marginal cost pricing. This is so for several reasons. First, marginal cost pricing is often perceived as being an unnecessarily complex approach that cannot guarantee the matching of revenues with anticipated costs and that could cause revenue instability.<sup>14</sup>

Second, most studies have shown that the price elasticity of demand for water is relatively small,<sup>15</sup> so difficulties in estimating marginal cost and equating price to it may not have much impact on water consumption in any case.

Third, past reliance on grants from senior levels of government encouraged many municipalities to build facilities that were larger than needed to service the community. Setting price equal to marginal cost, then, would leave these municipalities with insufficient funds to cover their annual operating costs. The tendency among municipalities in this position has been to lower price and encourage consumption to generate enough revenue to meet annual operating costs, even though this practice leads to over-consumption and wastes resources.

Fourth, municipalities cannot implement marginal-cost pricing if they fail to collect sufficient cost information including calculations of the opportunity cost of using water, or if they have this information but fail to compile it in a manner that permits the calculation of marginal costs.

Fifth, municipalities cannot implement marginal-cost pricing if they fail to set rates to capture differences in cost that arise because of differences in distance from source of supply and differences in the level of use according to season or time of day.<sup>16</sup>

Sixth, municipalities cannot implement this form of pricing if they do not include asset replacement costs in annual operating costs. Historically, annual asset replacement costs have been excluded from operating costs because municipalities relied on provincial grants (seen as free money to the municipality). This situation, by the way, is the same in most

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<sup>14</sup> American Water Works Association (1992). *Alternative Rates*. AWWA Manual M34. Denver, Colorado: American Water Works Association.

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GeoEconomics Associates Incorporated, Jeff Harris, Don Tate, Steven Renzetti and Acres Associated Environmental Limited (2002), "Economic Principles and Concepts as Applied to Municipal Water Utilities", a Study completed for the Ontario SuperBuild Corporation (Toronto: The Corporation), chapter 6; A.P. Grima (1984), "Empirical Basis for Municipal Water Rates Modification" *Canadian Water Resources Journal*, Volume 9, No. 3; Roger McNeill and Donald Tate (1990), *Guidelines for Municipal Water Pricing*, (Ottawa: Environment Canada, Inland Waters Directorate, Water Planning and Management Branch), pp. 16-17; Harry Kitchen (1975), *A Statistical Estimation of A Demand Function for Residential Water*, Social Science Series No. 11, Inland Waters Directorate, Environment Canada, Ottawa, for selected municipalities in Canada; and K. Sharratt (2000), "Do Water Meters Improve Water Efficiency?" *Ontario Pipeline*, for small municipalities in Canada.

<sup>16</sup> Dewees (2002), supra footnote 8.

countries except for Australia and Brazil where water utilities are required to recover a portion of capital costs from users.<sup>17</sup>

Finally, marginal-cost pricing cannot be implemented if municipalities are unmetered. Meters are important because they provide customers with an incentive to consume less water. Conversely, failure to use meters means that customers have less incentive to conserve water. There are a few Canadian studies<sup>18</sup> that have examined the impact of meters on water consumption. In general, most of them noted a decline in water use with the introduction of water meters. This response was in part psychological but also in part economic; that is, consumers optimized their consumption once volume based water rates were introduced. The usual pattern is for water use to fall substantially after meters installed and then to rebound somewhat as consumers become familiar with the new pricing scheme.<sup>19</sup> Although metering has proven to be effective demand-management tool and has led to reduced residential consumption,<sup>20</sup> the actual extent to which metering plays an effective role in water conservation may depend on the post-metering water-pricing regimes. In general, the literature indicates that the combination of meters and implementing water charges based on usage, may lead to a 30-50% drop in demand.<sup>21</sup>

Because of the alleged or perceived difficulties, marginal cost pricing is *not* the norm in the water supply industry; in general, average cost pricing prevails. This does not mean, however, that the concept of marginal cost pricing is of little use. Marginal cost pricing is important. A price that is less than marginal cost encourages consumption and wastes resources. Over the past few years, fortunately, efforts to reduce water consumption in response to dry spells or the exhaustion of low cost sources of supply have led to the emergence of water pricing initiatives that emphasize economic incentives.<sup>22</sup> These economic incentives frequently include conservation-oriented rate structures that target high volume users. In terms of marginal cost pricing, conservation pricing is justified if the opportunity cost of not conserving water is high.

All initiatives have emphasized the importance of water meters. Most have promoted the implementation of accounting, budgeting and information retrieval systems as well as the adoption of innovative pricing practices. All have argued for the inclusion of annual asset replacement costs in annual operating costs. Most support time of use prices to capture

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<sup>17</sup> Patrick C. Mann (1999), "Financing Mechanisms for Capital Improvements for Regulated Water Utilities", a report prepared for The National Regulatory Research Institute (NRRI), Ohio State University, Columbus, Ohio.

<sup>18</sup> McNeill and Tate (1990), supra footnote 15, at 16-17; Kitchen (1975), supra footnote 15, for selected municipalities in Canada; and Sharratt (2000), supra footnote 15, for small municipalities in Canada.

<sup>19</sup> McNeill and Tate (1990), supra footnote 15, at 15.

<sup>20</sup> D.B. Brooks and R. Peters (1988), *Water: The Potential for Demand Management in Canada*, Science Council of Canada.

<sup>21</sup> McNeill and Tate (1990), supra footnote 15, at 19.

<sup>22</sup> This is especially noted for the United States. Cuthbert, R.W., and P.R. Lemoine (1996). "Conservation-oriented water rates". *Journal AWWA*, 88 (11); Chesnutt, T.W. et al, (1997). *Designing, Evaluating and Implementing Conservation Rate Structures*. California Urban Water Conservation Council Beecher, J. (1994).

variations in costs according to the time of day or season of the year. Many have called for multipart tariffs to improve consumption efficiency and at the same time recover all fixed costs of production.

One Canadian simulation study substituted efficient prices for current prices and produced an interesting result.<sup>23</sup> In particular, it suggested that a reform of water prices to accommodate the price equals marginal cost pricing principle would lead to welfare gains of approximately four percent for the Greater Vancouver Water District – Province of British Columbia, Canada. A more recent study based on 77 water utilities in the Province of Ontario<sup>24</sup> in Canada concluded that the marginal cost of water supply exceeded the price for water in every municipality studied. For example, the average price to residential customers was \$0.32 per cubic metre while the estimated marginal cost was \$0.87 per cubic metre. By comparison, the average price for the non-residential sector was \$0.734 per cubic metre and the estimated marginal cost was \$1.492 per cubic metre. At the same time, the average marginal cost of sewage treatment was \$0.521 per cubic metre while the average price was \$0.128 per cubic metre

These large discrepancies between marginal cost and price generated estimates of noticeable deadweight loss per unit of output. Under-pricing water and sewage leads to a higher level of consumption than is allocatively efficient primarily because there is no incentive to restrict use and to use the service in an efficient manner. It has brought about investments in water and sewage treatment facilities that are larger than would exist under a more efficient pricing policy.<sup>25</sup> A recent empirical study on pricing of sewage by Norwegian local governments<sup>26</sup> showed that sound user charge financing of sewer services significantly reduced the cost of providing sewer services. Studies in Chile have shown that under-pricing and distortions in water and sewer pricing have been responsible for severe locational distortions.<sup>27</sup> Finally, it has been suggested that underpricing water supply and sewage treatment has discouraged innovation in developing alternative water and sewage treatment technologies.<sup>28</sup>

Similar studies in other countries also indicate that water and sewer rates are significantly lower than the marginal cost of production.<sup>29</sup> The results from these studies as with the

<sup>23</sup> Steven Renzetti, (1992) "Evaluating the Welfare Effects of Reforming Municipal Water Prices", *Journal of Environmental Economics and Management*, 22(2): 147-163.

<sup>24</sup> Renzetti, Steven (1999), "Municipal water supply and sewage treatment: costs, prices and distortions", vol. 32, no. 3 May, *Canadian Journal of Economics*, 688-704.

<sup>25</sup> Renzetti (1999), supra footnote 24.

<sup>26</sup> Lars-Erik Borge and Jorn Rattso (2003), "The Relationship Between Costs and User Charges: The Case of a Norwegian Utility Service", CESifo Working Paper No. 1033, Munich.

<sup>27</sup> Amrita G. Daniere and Jose A. Gomez-Ibanez (2002), "Environmental and Communications Infrastructure in Chile", in Edward L. Glaeser and John R. Meyer (2002), *Chile: Political Economy of Urban Development* (Harvard University, MA: John F. Kennedy School of Government), at 49-103.

<sup>28</sup> G. Gardner, *Recycling Organic Waste*, Worldwatch Paper 135, (Washington, D.C.: Worldwatch Institute, 1997); and S. Postel, "Facing Water Scarcity" in L. Brown, ed., *The State of the World* (New York: W.W. Norton, 1993).

<sup>29</sup> Easter, K.W., G. Feder, G. Le Moigne and A. Duda (1993) *Water Resources Management: A World Bank Policy Paper* Washington, D.C.: The World Bank; and M. Munasinghe (1992) *Water Supply and Environmental management: Developing World Applications*, Studies in Water Policy and Management,

Ontario study reported above typically use the utilities' own cost accounting procedures as the basis for their estimates. Other costs such as the value of raw water withdrawn from the natural environment, the opportunity cost of land holdings, the opportunity cost of invested capital and the harm caused by pollution are not included. When these costs are included, the gap between price and the full marginal cost of supply is larger than previously thought.<sup>30</sup> In fact, a recent study that included a competitive rate of return on assets, pollution externalities and the value of raw water as costs for one Canadian municipality estimated that the wholesale price for water would have to increase by at least 15 percent and possibly by as much as 45 percent if all social costs were to be recovered.<sup>31</sup>

## 2. *Solid Waste Collection & Disposal*

The funding choice here generally is between local tax revenues and user fees. Of these two possibilities, user fees in the form of a specific charge per bag/container are preferred on efficiency grounds for both collection and disposal. As in the case of water, users can be identified and per unit costs calculated. A charge that includes the full marginal social costs of collection and disposal<sup>32</sup> is critical if one is to provide an incentive for discouraging waste and over-use.<sup>33</sup>

Unlike water, however, there may be negative spillover consequences. For instance, individuals may avoid the fee or charge by throwing their refuse on neighbouring properties or disposing of it in rural areas. The higher is the price, the greater is the incentive for generating unwanted spillovers. Fortunately, most municipalities that apply user fees to garbage collection appear to have this problem under control.<sup>34</sup> The practice of imposing a user fee of any sort should be applauded because it leads to a greater concern about the generation of garbage and improves the efficient use of local public resources.

For solid waste disposal, the tipping fee should also be set with efficiency objectives in mind. If a municipality pays for disposal by a third party, the cost is clear - it is the cost per tonne of the contract. If the municipality operates the landfill site, the cost of placing a cubic metre of waste in a landfill is not just the current operating cost of the landfill - it must include all amortized capital costs, including closure and post closure costs, plus the opportunity cost of that space, plus the value of environmental harm caused by the waste and its disposal. The most difficult concept here is that of the opportunity cost of space.<sup>35</sup> Suppose that the operating cost of a landfill site is \$10 per cubic metre of waste disposed and

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(Bolder, Colorado: Westview Press).

<sup>30</sup> Steven Renzetti and Joseph Kushner, "The Under Pricing of Water Supply and Sewage Treatment" mimeograph (St. Catharines: Economics Department, Brock University, June 1, 2001), at 1. This study was completed for the Regional Municipality of Niagara, Province of Ontario, Canada.

<sup>31</sup> Ibid.

<sup>32</sup> For a detailed discussion of proper pricing for solid waste disposal (landfill sites), see James J. McRae (1994), *Efficient Production of Solid Waste Services by Municipal Governments*, Government and Competitiveness Project Discussion Paper no. 94-11 (Kingston, Ont.: Queen's University, School of Policy Studies).

<sup>33</sup> Ontario (1993), *Fair Taxation in a Changing World: Report of the Ontario Fair Tax Commission* (Toronto: University of Toronto Press in cooperation with the Ontario Fair Tax Commission), at 583-594.

<sup>34</sup> Dewees (2002), supra footnote 8, at 591.

that a new landfill will cost \$50 per cubic metre. The opportunity cost of placing a cubic metre of waste in the existing landfill is not \$10 but \$10 plus an amount determined by the fact that each cubic metre so disposed hastens the time when the city will have to pay \$50 per cubic metre. The socially efficient tipping fee at the existing landfill is not \$10 but \$50 discounted for the number of years until the new landfill will be required.

Unfortunately, government-operated landfills tend not to charge tipping fees that reflect future scarcity of landfill sites. Worse yet, many municipalities in Canada only charge per-tonne fees to private haulers. The tipping fees for garbage brought in by municipal operators is almost always paid for by local taxes and not by tonnage charges. The efficient size of the disposal site will only be determined if all waste is paid for on the basis of a uniform per-tonne tipping fee. Further inefficiencies exist because tipping fees rarely include the expected value of environmental harm, except where financial liability for that harm is anticipated and built into the cost of operation. Environmental harm includes the annoyance to neighbours of the landfill from smells, birds, blowing refuse, and truck traffic. It may also include contamination of the groundwater if leachate escapes from the landfill during its operation or even decades after it is closed.<sup>36</sup> All of these costs should be included in the tipping fee if we are to get an efficient size of operation.

There have been a number of studies on the effects of user-pay systems in municipalities in Canada and the United States. In most studies, free (local tax-supported) garbage pickup was compared with a per-bag fee averaging about \$1.00 per bag but ranging from \$0.68 to \$2.00. Most of the studies measured the reduction in tonnage of regular garbage collected, and many measured the increase in the collection of recyclables. In one study on 21 cities in the United States with population less than 50,000, average reductions in waste volumes of 34 to 43 percent were observed.<sup>37</sup> A subsequent study of five communities in the Midwest of the United States and four cities in California found that pay per bag was somewhat more effective in reducing waste than were monthly subscription fees for garbage carts.<sup>38</sup>

The City of Seattle, Washington (United States) diverted 24 percent of its solid waste and lowered its total waste management costs after imposing a subscription user-pay system.<sup>39</sup> The introduction of a subscription fee per can based on can size reduced solid waste disposal in the City of Austin, Texas (United States) by 23 percent.<sup>40</sup> It also increased recycling in general and yard waste separation in particular. A further study for the Greater Toronto Area

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<sup>35</sup> The following example is borrowed from Dewees (2002), *supra* footnote 8, at 593-594.

<sup>36</sup> Ibid

<sup>37</sup> Marie Lynn Miranda, Jess W. Everett, Daniel Blume, and Barbara A. Roy Jr. (1994), "Market-Based Incentives and Residential Municipal Solid Waste", *Journal of Policy Analysis and Management*, vol. 13, no. 4, at 681-698.

<sup>38</sup> Marie Lynn Miranda and Joseph E. Aldy (1996), *Unit Pricing of Residential Municipal Solid Waste: Lessons from Nine Case Study Communities*, a report prepared for the Office of Policy, Planning and Evaluation, US Environmental Protection Agency (Durham, NC: Duke University School of the Environment).

<sup>39</sup> Lisa A. Skumatz and Cabell Breckinridge (1990), *Variable Rates in Solid Waste: Handbook for Solid Waste Officials*, vol. 1, *Executive Summary* (Seattle: Seattle Solid Waste Utility), at 3 and 9.

<sup>40</sup> Joe D. Word, Katherine Higginbotham, and David Plueneke, (1992), "Variable Rate System Works in Texas", vol. 33, no. 7 *BioCycle*, at 52-53.

(Canada) estimated that a \$1.00 per-bag fee for solid waste collection would divert an additional 4 to 14 percent of materials from solid waste generation.<sup>41</sup>

In general, all studies reported reductions in solid waste tonnage because consumers increased recycling, generated less waste, and increased the use of other options such as composting. Prices work!

### **3. Public Transit and Transportation**

Municipal public transit systems are funded mainly by fare box revenue, municipal taxes and grants from senior governments. In addition, some systems generate additional funds from charter/rental services, advertising, and miscellaneous income.

Concern about operating deficits often brings discussions over the level of fares and fare structure that ought to be charged to transit users. Local government officials may consider a number of social, economic and political factors in setting fares. These include the availability of and access to substitute forms of transportation, the ability of local residents to pay for transit services, the attitudes of local politicians towards acceptable levels of fares, and the portion of operating costs to be recovered from fare box revenue, and so on.<sup>42</sup> The tendency, in many communities, is to set different fares for adults, children, students and seniors and to offer discounts for monthly passes. Where variation exists, the highest fare is for adults, with lower fares for seniors, students, and children. Furthermore, in some municipalities, lower fares are available for special groups - the blind, the disabled and the unemployed.

Asking public transit users to pay a price equal to the full marginal social cost would be efficient and fair only if private transit (automobiles) users paid a charge that reflected their full marginal social cost. Since the latter does not happen, marginal cost pricing for public transit is not efficient. Here, efficiency can be pursued through the second best solution of subsidizing local public transit, and the question then becomes that of establishing the correct subsidy.

The current fare structure often creates economic problems through what it does and what it does not do. Failure to charge higher prices in peak-hours creates an incentive to over-invest in public transit infrastructure and provide greater capacity than can be justified on efficiency grounds. On the other hand, higher peak-load fares may discourage public transit use and increase the use of private autos. To prevent excessive auto use, a more effective and direct policy might include the following.

- Permit municipalities to tax parking lots.
- Permit municipalities to impose their own vehicle registration fees on automobile owners. Vehicle fees could be based on features such as age and engine size (older and larger vehicles generally contribute more to pollution), location of the vehicle

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<sup>41</sup> Ontario, Ministry of Environment and Energy (1994), *Greater Toronto Area 3Rs Analysis: EA Input Document* (Toronto: Ministry of the Environment and Energy).

<sup>42</sup> Harry Kitchen, "Urban Transportation Policy," in Richard A. Loreto and Trevor Price, eds., *Urban Policy Issues: Canadian Perspectives*, (Toronto: McClelland and Stewart, 1990). 107-23.

(cars in cities add more to pollution and to congestion), and axle weight (heavier vehicles do substantially more damage to roads and require more costly roads to be built).

- Permit municipalities to issue drivers' licence with differential fees where the fees might take into account driving records (20 percent of drivers are responsible for 80 percent of accidents).<sup>43</sup>
- Permit cities and metropolitan areas to have access (if they don't already have it) to a municipal fuel tax with revenues used to fund public transit and transportation systems.
- Permit cities and metropolitan areas to implement congestion charges (tolls) as is done in London, England with these charges varying by time of day and perhaps season of year if there are seasonal differences in highway usage. As an aside, it is interesting to note that Singapore is currently proposing to increase the progressivity of its local revenue system by imposing higher levies and charges for a number of government services including road pricing through electronic monitors that charge for usage of public roads.<sup>44</sup>

Problems generated by the lack of peak-load charges are complicated by the availability of discounts. These discounts are used primarily by rush-hour travelers, effectively lowering the per trip charge precisely at a time when higher fares could make more economic sense. As well, lower fares for senior citizens, children, and students are difficult to justify, especially at peak hours when transit systems are overused. And any subsidies that are supplied on the basis of age and completely unrelated to income are difficult to support on efficiency grounds.

Finally, since the marginal cost of carrying a rider varies with distance traveled, failure to use zone charges within large metropolitan areas creates efficiency and fairness problems. Fixed fares mean that short distance travelers overpay while long-distance travelers underpay. This kind of subsidization policy is subject to the same criticism directed at reduced rates for seniors, children, and students.

#### **4. *Public Recreation***

Municipal parks and recreational facilities rely on user fees for a variety of facilities - arenas (skating admissions, hourly ice rentals and instruction), swimming (swimming admissions, memberships and instruction), tennis (court fees, membership and instruction), camps and camping (campground fees and day camp charges) and so on. Here, user fees may be defended on two grounds. First, it permits individuals to use recreational facilities that could not be afforded from comparable private sector facilities. This type of subsidisation, however, is neither efficient nor fair because municipalities ought not to be concerned with major income distribution questions. Furthermore, if income distribution were a local responsibility, it should be provided through relief based on income or some other measure of ability to pay and not by reducing prices for everyone.

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<sup>43</sup> Richard M. Bird (2003), "Local and Regional Revenues" (Washington: The World Bank Institute).

<sup>44</sup> Richard M. Bird and Enid Slack (2004), "Fiscal Aspects of Metropolitan Governance" International Tax Program Paper 0401 (Toronto: Joseph L. Rotman School of Management, University of Toronto), at 29.

Second, municipal recreational facilities and programs may generate positive externalities or spillovers. These externalities, it is suggested, may take the form of a more physically fit and healthier society and hence lower medical costs for everyone. In reality, this may be a questionable supposition for the externalities are unlikely to be significant. Indeed, they would probably be greater under an alternative and equally subsidised scheme of improved health and educational programs.

Since the largest portion of the benefits accrue directly to users, these services should be priced so as to extract sufficient revenues to cover a comparable portion of the costs. The public sector, however, has not adopted many aspects of private pricing for recreational services. Private suppliers, faced with the prospect of recovering all costs through their pricing structures, have recognised the advantages of such things as an annual fixed levy plus an admission charge for each use of the facility. Municipalities virtually never follow this approach and, as such, neither cover cost nor efficiently utilise their scarce resources.

With the exception of a few local public services such as arena rentals and golf courses in North America, access to municipally provided facilities is generally rationed by queuing rather than prices. Failure to adopt a peak-load pricing policy so as to even out the demand over a day and a week has led to over-investment in many recreational facilities. This has been aggravated further by reduced charges for children and students (lower rates for skating, swimming, etc.) at all times.<sup>45</sup> Lower fares for specific groups might be justified if a further restriction, as is frequently the case for private facilities but not public facilities, limiting them to use of the facility in off-peak hours were imposed. Such a policy approximates the use of a peak-load pricing structure.

## **5. *Library Charges***

The current structure of user fees employed by many local public libraries may be in need of reorganisation. Local public libraries collect money from rentals, overdue books, and non-resident fees (fixed charge), but seldom ever from local residents on a usage basis. Consequently, a high percentage of funding for local public libraries comes from general municipal revenues.

Support for this subsidisation may be warranted if significant and positive externalities arise from the existence of public libraries. Clearly, positive externalities do exist, both in terms of easy accessibility to a vast collection of library resources and because a better and more educated society creates a better environment in which to live. Substantial private benefits, however, also accrue directly to the users of these services. As such, it is difficult to justify the degree of general funding currently provided. A better pricing policy would include a usage charge that approximated the marginal private cost of each visit plus a government subsidy (from a senior level of government) covering the spillover benefits that extend beyond the local community.

### **B.3. *Should User Fees Be Regulated?***

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<sup>45</sup> Richard Bird and Enid Slack, *Urban Public Finance in Canada*, 2nd edition, (Toronto: Wiley, 1993) at 70-73.

As with local tax rates, there may be no need to regulate user fees if all decision-making responsibilities rest with democratically elected local councils; that is, if the locally elected council sets both the tax rates and user fees. Here, citizens/taxpayers have the ultimate control or power over council's tax decisions – the opportunity to vote the politicians out at the next election. There is, of course, the obvious need for setting performance measures and benchmarking.<sup>46</sup>

If, however, the services for which user fees are applied are provided by a local government enterprise governed by an independent or quasi-independent elected or appointed council, some type of regulation may be required. Support for a price regulatory scheme is defended on the grounds that it is necessary to protect consumers/taxpayers from inefficient and unfair price increases when decisions over service responsibility and funding are made in an environment in which there is no competition.<sup>47</sup> In general, there are two types: rate of return and price cap regulation.<sup>48</sup>

Where rate of return is used, the regulator defines a fair and reasonable profit level and the provider has the opportunity to increase price to the point where its maximum profit level is reached. Price cap regulatory schemes concentrate on creating incentives for the provider to increase efficiency.<sup>49</sup> While each of these has been used, they both have their strengths and weaknesses as is described and discussed in another paper prepared for this workshop.<sup>50</sup>

## **C. Local Taxation – An International Comparison**

Since most locally generated revenues come from local taxes (user fees are the other major source of locally generated revenue), this section describes a number of features of local taxation in federal (three levels of government) and unitary (two levels of government) countries that are included in the Organization for Economic Cooperation and Development (OECD). This section starts by briefly outlining taxes that are available to local governments along with their relative importance. This is followed by a discussion of the fiscal autonomy and discretion that local governments have over their tax base and rate structure. This section concludes by examining a number of issues in local taxation.

### ***C.1 Pattern of Local Taxation***

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<sup>46</sup> Discussed in Harry Kitchen (2004), “Delivering Local/Municipal Services”, at 29-30, another paper prepared for this workshop.

<sup>47</sup> KPMG and CMS Cameron McKenna (2002), “Analysis of Business Models and Their Applicability to Ontario”, Study 7 prepared for the Ontario SuperBuild Corporation, (Toronto: the Corporation), Part IV.

<sup>48</sup> Akos Szalai (2001), “New Models of Privatizing Public Utilities: Highlights of Reform in Post-Soviet Countries”, in *Local Government Brief: The Quarterly Journal of Local Government and Public Service Reform Initiative* (Budapest, Hungary), 18-24, at 23.

<sup>49</sup> For a more detailed discussion, see KPMG et al. (2002), *supra* footnote 47, Part V.

<sup>50</sup> Kitchen (2004), *supra* footnote 46, at 27-29.

Table 1 illustrates the relative importance of a range of local taxes in OECD countries. From this table, the following may be noted.

1. Income taxation (corporate and personal) is the most important source of local tax revenues in fourteen countries (column 2). In Denmark, Finland, Norway, Sweden, Luxembourg, and the Czech Republic, it accounts for more than ninety percent of local revenue. In Australia, Canada, Mexico, France, Greece, Hungary, Ireland, Netherlands, New Zealand and the United Kingdom, by comparison, local governments do not have direct access to income tax revenue.
2. Local sales taxes (in various forms but referring generally to taxes on goods and services that are sold) generate between 20 percent and 76 percent of total local tax revenue in ten countries (column 3). At the other extreme, local sales taxes are non-existent in five countries and produce less than ten percent of local revenue in another twelve countries.
3. Property taxes (column 4) account for more than ninety percent of all local tax revenue in five countries (Australia, Canada, Ireland, New Zealand, and the United Kingdom). By contrast, local governments in ten countries get less than 10 percent of their tax revenue from the property tax.
4. Local governments in France, Italy, Greece, and Turkey rely fairly heavily on other local taxes (column 5), mainly on businesses.
5. Column 6 of Table 1 provides information on the relative importance of local taxes by calculating local taxes as a percent of gross domestic product (a measure of the level of national income generated in each country). In federal countries, local government taxes varied from a low of 0.1 percent of GDP in Mexico to a high of 5.0 percent in Switzerland with the unweighted average for federal countries being 2.9 percent. For unitary countries, local government's tax share of GDP ranged from a low of 0.4 percent in Greece to a high of 16 percent in Sweden and 15.9 percent in Denmark with the unweighted average for unitary countries being 4.8 percent.
6. Column 7 looks at the relative importance of local taxes in the entire tax system in each country. When local taxes are calculated as a percent of total taxes (central government, state government, local government and social security funds), they range widely in relative importance. For example, in federal countries, local taxes account for less than 1 percent of all taxes in Mexico (the lowest) and 14 percent in Switzerland (the highest) with the unweighted average being 7.5 percent. For unitary countries, the range extends from a low of 1 percent in Greece to a high of almost 33 percent in Denmark with the unweighted average being 12.7 percent.

Countries (1)	Tax sources as a percent of total local tax revenues				Local taxes as a percent of GDP (6)	Local Taxes as a percent of all taxes <sup>5</sup> (7)
	Income <sup>1</sup> (2)	Sales <sup>2</sup> (3)	Property <sup>3</sup> (4)	Other <sup>4</sup> (5)		

Federal:						
Australia	0.0	0.0	100.0	0.0	1.0	3.0
Austria	55.3	29.7	9.9	5.1	4.4	10.1
Belgium	86.5	13.2	0.0	0.3	2.1	4.7
Canada	0.0	1.9	91.3	6.8	2.9	8.1
Germany	78.0	6.0	15.8	0.2	2.6	7.5
Mexico	0.0	2.6	86.7	10.8	0.1	0.8
Switzerland	84.4	0.3	15.3	0.0	5.0	14.0
United States	6.5	21.8	71.8	0.0	3.5	11.5
Unweighted average	38.8	9.3	48.8	2.9	2.9	7.5
Unitary:						
Czech Republic	90.8	4.2	4.6	0.4	4.8	12.4
Denmark	93.4	0.1	6.5	0.0	15.9	32.9
Finland	95.4	0.0	4.4	0.1	9.9	21.2
France	0.0	11.5	48.2	40.4	4.4	9.7
Greece	0.0	46.3	0.0	53.8	0.4	1.0
Hungary	0.8	76.2	22.5	0.4	2.0	5.2
Iceland	78.0	7.6	14.3	0.0	8.3	22.4
Ireland	0.0	0.0	100.0	0.0	0.6	1.8
Italy	12.2	8.6	18.6	60.6	4.8	11.4
Japan	47.4	20.7	30.9	1.0	7.0	25.6
Korea	16.6	26.5	53.3	3.6	3.9	15.1
Luxembourg	92.9	1.3	5.6	0.3	2.4	5.9
Netherlands	0.0	44.0	56.0	0.0	1.4	3.4
New Zealand	0.0	9.7	90.3	0.0	1.8	5.8
Norway	89.9	2.2	7.9	0.0	6.5	16.3
Poland	78.4	1.8	19.8	0.0	5.7	16.3
Portugal	21.6	33.7	44.5	0.2	2.3	6.3
Slovak Republic	59.9	11.8	28.2	0.1	1.5	4.0
Spain	25.2	36.1	37.3	1.4	5.9	16.9
Sweden	100.0	0.0	0.0	0.0	16.0	29.8
Turkey	24.7	31.5	6.5	37.3	4.3	13.0
United Kingdom	0.0	0.0	99.5	0.5	1.5	4.1
Unweighted average	38.0	16.8	31.6	9.1	4.8	12.7

<sup>1</sup> Includes individual and corporate income tax plus payroll tax.

<sup>2</sup> Includes general consumption taxes, taxes on goods and services (fuel taxes, hotel and motel occupancy) and taxes on use on goods or on permission to use goods or perform activities.

<sup>3</sup> Taxes on property including recurring taxes on net wealth.

<sup>4</sup> Includes social security contributions in Austria and some residual taxes mainly on business (Austria, Canada, and Germany) and miscellaneous taxes everywhere.

<sup>5</sup> Total includes central government, state government, local government and social security funds.

Source: OECD, *Revenue Statistics 1965-2001* (Paris: OECD, 2002), Tables 135 to 168.

The above points lead to a number of observations including the following.

1. Since the level of local taxation is primarily driven by expenditures, local governments in those countries (federal and unitary) where local taxes are a relatively small percentage of total taxes generally have fewer expenditure responsibilities.

2. The relative importance of local taxes in a country's tax system is generally less in federal countries than in unitary countries – federal countries have a middle (state/provincial) level of government that collects taxes, some of which are in the domain of local government in unitary countries.
3. Local property taxes play a more important revenue role (almost 50 percent of all taxes on average) in federal countries than in unitary countries (almost 32 percent of total local taxes, on average). By comparison, local income taxes, on average, are equally important in both unitary and federal countries – around 38 to 39 percent of all revenues. Local sales taxes are relatively less important in federal countries (slightly more than 9 percent) than they are in unitary countries (almost 17 percent). This difference generally exists because the state level of government collects considerable sales tax revenue in federal systems; whereas, this source of revenue is more likely to be available to local governments in unitary countries.
4. At the local government level, there is heavy reliance on income taxes in the Nordic countries whereas heavy reliance is placed on property taxes in countries that, in the past, were part of the British Commonwealth or significantly influenced by it.
5. Where local taxes are a comparatively higher percentage of total tax revenue and GDP, local governments tend to rely more heavily on local income taxes.
6. Local governments in some countries only have access to one tax (property or income) whereas local governments in other countries have access to two or three local taxes.
7. Where local taxes account for more than 10 percent of all tax revenue, there is no common pattern. Local governments in some of these countries have access to a wide range of taxes (Austria, some states in the United States, Italy, Iceland, Japan, Korea, Spain, and Turkey). In other countries where local government taxes are equally important, (Nordic countries and the Czech Republic), local governments are restricted to only one tax of any significance.

From the information provided in Table 1, there are no definitive conclusions that can be drawn about patterns of local taxation across OECD countries nor can anything be concluded about the appropriateness of one tax over another tax. There is nothing in the data to suggest that local government is more or less efficient, effective and accountable if it has access to a range of taxes as opposed to only one major tax. Local government access to a specific tax or taxes is dependent on a number of things including the local government's capacity to administer the tax; the types of expenditures that local government must fund; the willingness of a senior level of government to assign taxes to local government; constitutional and legislative requirements; and a variety of other factors.

## ***C.2 Fiscal Autonomy In Local Taxation***

International experience tells us that an essential ingredient in creating a good local public sector is a responsive and responsible local government. A necessary condition for such a government is that it possess the fiscal capacity to provide required and desired levels of

public infrastructure and services.<sup>51</sup> In other words, local governments carrying out their expenditure responsibilities are likely to be more efficient, responsible and accountable if they are required to raise the revenue that they spend.<sup>52</sup> Furthermore, this is dependent on the fiscal autonomy or fiscal discretion that local governments have in determining their tax base and setting their tax rates. Fiscal autonomy, in theory, is greatest when local governments are free to determine both the tax base and tax rates without senior governments imposing limits on either of these. Fiscal autonomy is least when both the tax base and tax rate are set or controlled by senior levels of government. Of these two possibilities, permitting local governments to control their own tax base is often administratively costly and can give rise to innumerable economic inefficiencies when local government deliberately distorts its tax base to satisfy some constituency or other. A preferred option is one where local governments simply piggyback onto an existing state tax base with locally determined rates – this is administratively inexpensive and minimizes the potential for inter-municipal distortions in the tax base.<sup>53</sup>

Tax sharing arrangements between different levels of government also lead to different levels of tax autonomy. Here, the degree of autonomy will depend on whether or not local government consent is required before any change can be made in the tax sharing formula.<sup>54</sup>

Table 2 offers a thumbnail sketch of the kinds of autonomy and its relative importance in a number of OECD countries. As with reliance on local taxes, there is considerable variation across countries. In particular, the following may be observed.

1. Local governments set both the tax base and tax rate in very few countries (column 3). Furthermore, where both are at the discretion of local governments, local taxes tend to be a very small percentage of overall taxes. For example, in New Zealand, local taxes account for less than 6 percent of all taxes and almost all of this is from the property tax where local governments have the power to control both the base and rate. Similar comments may be made for local governments in Portugal and Spain where local governments also rely heavily on property taxes.
2. Local governments in every country, except for Mexico, have some control over local tax rates. In countries such as Belgium, Switzerland, Denmark, Finland, Iceland, Japan, Netherlands, Sweden and United Kingdom, 84 percent or more of local tax revenue is obtained from local taxes where local governments have control over local tax rates. While not included in Table 2, it could also be noted that local governments in Canada, the United States and Australia have considerable control over local tax rates and in a few cases over the local tax base. At the other extreme, less than 45

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<sup>51</sup> Jonathan A. Rodden, Gunnar Eskeland, and Jennie Litvack, eds, (2003), *Fiscal Decentralization and the Challenge of Hard Budget Constraints*, (Cambridge: MIT Press).

<sup>52</sup> Richard Bird (2001), “Subnational Revenues: Realities and Prospects”, (Washington: World Bank Institute), at 3.

<sup>53</sup> In practice, experience suggests that local administration increases local control. See John L. Mikesell (2003), “International Experiences with Administration of Local Taxes: A Review of Practices and Issues”, World Bank draft paper, available at [www.worldbank.org/publicsector/ta/Mikesell.doc]

<sup>54</sup> Organization for Economic Cooperation and Development, (1999) *Taxes Powers of State and Local Government*, OECD Tax Policy Studies No. 1, (Paris: OECD), p. 10.

percent of local tax revenue comes from local government's ability to set tax rates in Austria, the Czech Republic, Hungary, Norway, and Poland (and Mexico, as noted above).

3. In many countries, there exists a form of revenue sharing between local and state (federal), or local and central (unitary) governments for a portion of local tax revenues. In none of the countries is the revenue sharing split determined by local governments.
4. In four countries, the split set out in the revenue sharing arrangement may be changed only if local governments consent to it; for example, in Austria, this revenue sharing arrangement accounts for over 80 percent of local tax revenue; in Germany and Poland, for around 50 percent; and in Spain, for 16 percent.
5. The split in the revenue sharing arrangement is fixed in legislation in seven countries but the fixed portion is really only significant in the Czech Republic (90 percent of local tax revenues) and Mexico (74 percent of local tax revenues).
6. The central government is responsible for determining the central-local split in revenue sharing arrangements in Hungary and Norway. In the former country, this split accounts for 70 percent of local tax revenue and in the latter country, for 95 percent.
7. The central government solely determines the tax base and sets the tax rate for some local taxation in four countries but in only two of them does it amount to anything of substance. In Portugal, 37 percent of all local tax revenues come from taxes of this type and in Mexico, the comparable percentage is 26 percent.

This broad brush summary illustrates the range of local taxes and the extent to which local governments have some control over rates and base. To expand on the local tax system and fiscal autonomy in slightly more detail, the following section describes the local tax system in a few countries.

Table 2: Local Government Taxes by Type of Tax Autonomy in Selected OECD Countries

Country (1)	Extent of Tax Autonomy							
	Local government sets			Revenue split under tax sharing arrangements				Senior govt. sets local rate and base (10)
	tax rate and base (3)	tax rate only (4)	tax base only (5)	Set by local govt. (6)	Only changed with consent of local govt. (7)	Fixed in legislation (8)	Determined by central govt. (9)	

Percentage distribution of local taxes								
Federal:								
Austria	9	11			81			
Belgium	13	84				2	1	
Germany	1	52			47			
Switzerland		97				3		
Unitary:								
Czech Republic	2	5	3			90		
Denmark		96				4		
Finland		89				11		
Hungary		30					70	
Iceland	8	92						
Japan		94						6
Mexico						74		26
Netherlands		100						
New Zealand	98							2
Norway		5				1	94	
Poland		45	1		54			
Portugal	49	14						37
Spain	33	51			16			
Sweden	4	96						
United Kingdom		100						

Source: OECD (1999) *Taxing Powers of State and Local Government*, (OECD: Paris), Table 1.

### C.3 Local Tax Systems In More Detail

The discussion here includes one country (Canada) where local governments have direct access to only one tax (property) and one country (United States) where local governments may have access to a range of local taxes. As well, it describes some potentially interesting features of local tax systems in a few other countries. The discussion is not intended to be comprehensive; rather, it is designed to highlight some of the nuances of local tax systems in a few countries.

**Canada:** Local governments are creatures of the province and as such, are permitted to use only one tax – the property tax.<sup>55</sup> Although free to set their general property tax rate, municipal governments face a significant number of provincial rules and regulations with respect to their tax base and rates. While some of these restrictions and constraints may be necessary to satisfy a variety of broader social and economic objectives, the point is they do restrict municipal fiscal autonomy. Examples of these restrictions and controls are described here.

In all ten provinces and the three territories, real property is the tax base. Its principal components include land, buildings and structures and in some provinces, machinery and equipment. Provincial government's legislation/regulations exempt certain properties from property taxation, however. These include colleges and universities, churches and cemeteries, public hospitals, charitable organizations, and so on. Under the Constitution, provincial and federal owned properties are also exempt from property taxation. For federal and provincial properties including colleges, universities and public hospitals, grants-in-lieu of taxes (based on number of students or number of beds) are paid to the municipality. As

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In some provinces, the provincial government also imposes a property tax.

well, provincial legislation/regulations require special treatment for other types of property – agricultural land and managed forest properties receive favourable property tax treatment in every province. Favourable treatment takes the form of exemptions, lower property tax rates, or assessment on the basis of the land’s current use rather than its market value.

For all taxable properties, every province has legislation that calls for the assessment of real property at some value. In some provinces, this is called "real and true value", "current value", or "fair value". In practice, these terms refer to market value. To avoid unintended variation in provincial assessment practices and to achieve intended variation, every province has established a central assessment authority and has moved recently to more updated and frequent reassessments.

Although municipal governments are responsible for setting their general property tax rate without restriction, provincial rules and regulations control the rate structure across all properties. For example, some provinces permit municipalities to apply a single general tax rate to all classes of property; others permit the application of different rates to different property classes with lower rates assigned to residential and farm properties and higher rates to commercial and industrial properties. In one province (Prince Edward Island), property tax rates are lower for residents of the province than for non-residents of the province.

In summary, municipal governments are free to set their general tax rate. Their tax base and rate structure (across property types), however, are frequently controlled or restricted by provincial legislation, rules and regulations.

**United States:** In some states, there is considerable variation in a municipality’s access to local taxation. For example, in some states, municipalities are permitted to use an income tax, a sales tax, and a property tax. Many cities use a fuel tax. In other states, municipalities may be restricted to the property tax only; in still others, they have access to the property tax and a municipal sales tax. Regardless of the tax or taxes permitted, state approval or permission has either been legislated or granted.

The United States experience with a municipal income tax may be of relevance because of the variation in the way in which it is applied. Taxes are generally imposed as a flat rate ranging from a low of one percent to a high of almost five percent on residents. The method for setting tax rates varies across states. For example, the authority to set tax rates is sometimes constrained by the state or by voter approval. Some cities levy local income taxes on earnings; some levy on earnings and business net profits. Some cities apply lower rates on commuters than they do on residents.<sup>56</sup> In total, approximately 3,800 local governments currently levy local income taxes in the United States. Although, local governments in Pennsylvania (one state out of 50 states) account for 2,800 of the total, localities in fifteen other states also rely on this tax.<sup>57</sup> Further, local income taxation is primarily a municipal tax, but in some states (Indiana and Maryland, for example), it is a county tax. As well school

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<sup>56</sup> Tracy Von Ins (2001), “Local Income Taxes: A Tale of Four Cities”, *Nations Cities Weekly*, August 13.

<sup>57</sup> James D. Rodgers and Judy A. Temple (1996), “Sales Taxes, Income Taxes, and Other Nonproperty Tax Revenues”, in J. Richard Aronson and Eli Schwartz, eds., *Management Policies in Local Government Finance*, Fourth Edition (Washington, D.C.: International City Management Association), 229-258, at 242-243.

districts rely on income tax revenues in Pennsylvania, Ohio and Iowa.<sup>58</sup> In terms of revenue importance for municipalities, income tax revenues generate well over 20 percent of local tax revenue in Ohio and Pennsylvania and about 30 percent in Maryland. In some cities, this revenue source is so important that it accounts for more than 50% of city own source revenues.<sup>59</sup>

Also, in the U.S., local governments in thirty-one states and the District of Columbia levy general sales taxes. Across these states, a relatively low rate of 0.25 percent is imposed in a number of transit districts to subsidize public transportation. In other states, the rates may be as high as five percent with revenues not earmarked for specific expenditures.<sup>60</sup> In some states, such as Virginia and California, the local sales tax is universal. In others, it is used by some municipalities and not others. Regardless of the locality there are two common features. First, virtually, all general sales taxes are 'ad valorem' (fixed percent of selling price) rather than per unit taxes; and second, the tax is levied on retail purchasers.<sup>61</sup>

All municipalities impose a property tax, with two minor exceptions. These are in Oklahoma where cities use the property tax to secure bonds and not to fund services and the City of Springfield, Ohio where a local income tax is used instead of the property tax. Issues around setting local property tax rates, determining the tax base, and state restrictions on local taxation authority are similar to those described for Canada.

All local taxes in the United States are permissive taxes. As noted, the property tax is used almost everywhere. Nearly all cities impose a sales tax if given the authority, but this is not true for the income tax. For example, all cities in Georgia and Michigan have the option to use an income tax, but only about 20 cities in Michigan have adopted it. Georgia is a different case. The state law says that a city can impose an income tax only if a majority of the registered voters (not the actual voters) approve it. With voter turnout generally less than 50 percent, approval is unlikely to be forthcoming.

Property taxes are administered and collected at either the county level (most common) or by cities. Local governments are free to set their tax rates but the tax base is essentially controlled by state policy (legislation) and practice (similar to Canada). Most sales taxes are piggybacked onto the state tax with the state collecting the revenue and remitting it to the originating municipality. Income taxes are collected by the municipality in Pennsylvania, Ohio, Kentucky, and Michigan. Yonkers and New York City's income tax is piggybacked onto the state income tax. For income and sales taxes, the state frequently regulates the tax rate or range of tax rates that can be used.

***Nordic countries:*** The best known examples of local income taxes are in these countries (Sweden, Norway, Finland, Denmark) where it is the only local tax of any significance (Table 1). Local income taxes are basically levied at a flat, locally established rate on the

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<sup>58</sup> For a discussion of local income tax structures and issues in the United States, see Robert L. Bland (1989), *A Revenue Guide for Local Government* (Washington, D.C.: International City Management Association), at 89-101.

<sup>59</sup> Rodgers and Temple (1996), supra footnote 57, at 242-245.

<sup>60</sup> Ibid, at 232-234.

<sup>61</sup> Bland (1989), supra footnote 58, at 51-67.

same tax base as the national income tax and collected by the central government. The progressive part of the rate structure is the central income tax. After the local income tax is collected by the central government, these revenues are then remitted to each local jurisdiction.

**Belgium:** Local governments in Belgium rely almost entirely on local income taxes. Here, the local tax is not a surcharge on the central tax base (as in the Nordic countries); rather, it is a surcharge levied as a percentage of the national tax liability.

**Switzerland:** In most cantons (middle level of government), local governments are permitted to levy surcharges at locally established rates on cantonal income taxes, not on the income tax of the central government. Local taxes are levied on both income and assets (a tax on personal wealth and a tax on corporate net worth - net wealth tax).

**Japan:** Local governments rely on all three taxes but the local income tax system is rather unique. Municipal governments may tax corporations. Each year, the rate is set locally and it applies largely to national corporate taxes paid in the previous year with the tax base in each jurisdiction determined by the proportion of employees working in that jurisdiction. Corporations are also subject to a progressive municipal enterprise tax based directly on income – here, the rate varies with the category of business activity. France also has a local tax of this type.

Individuals also pay a local income tax at progressive rates on the same base as the national tax. Non-residents working in a municipality are subject to a poll tax levied at a nationally determined per capita rate that varies with the size of the municipality. Finally, all taxes are assessed and collected locally.<sup>62</sup>

**Germany:** Local government revenues in Germany come from a variety of sources. The business tax (primarily a tax on corporate profits whose base is determined by the central government with the local rate set by individual municipal governments) accounts for about 40% of local tax revenue after sharing. Personal income taxes are next in order of importance. They represent the local share of the national income and wage tax that is determined by the state and federal governments. Overall, local governments receive 15 percent of these revenues (this is stipulated in the Constitution) but the share for each municipality may vary. Revenues are distributed by state governments to local governments in originating municipalities (that is, where the taxpayer resides) up to a limit approximating 15 percent of national GDP per capita. This limits the amounts distributed to high-income communities and introduces an equalizing effect. Local property taxes also exist but are considerably less important than the business tax. In many municipalities, the property tax raises about 1/6 of the revenue generated by the business tax. Fees and charges are another important source of local funds, generally accounting for considerably more revenue than the property tax.<sup>63</sup>

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<sup>62</sup> Bird (2001), *supra* note 52, at 18-19.

<sup>63</sup> Harry Kitchen, (2002), “Municipalities: Status and Responsibilities, Budgeting and Accounting”, a paper prepared for the Canada-Russia project under the auspices of the ‘Consortium for Economic Policy Research and Advice (CEPRA)’, at 15-16.

## ***C.4 Issues in Local Taxation***

Recent trends, in most countries over the past decade, have displayed the following pattern. Senior levels of government, almost everywhere, have devolved additional spending responsibilities onto local governments while simultaneously reducing grant funding for these governments.<sup>64</sup> To offset this, municipalities have increased their reliance on own source revenues - user fees, permits, charges and whatever local taxation powers they have. At the same time, the growing importance of globalization has increased the importance of international cities. Cities are the major incubators of economic prosperity and the quality of urban life has become a prime determinant of location decisions made by firms and investors. International cities do not speak through their state or central governments; rather they speak for themselves. In this context, there has been increasing pressure, in some countries, to give cities access to additional taxes and greater autonomy in making their own fiscal decisions.

These trends or patterns raise a number of fiscal issues that are important for local and metropolitan governments in any country. These will be discussed within the benefits based taxation model and will draw upon practices in a number of countries.

### ***1. Which Tax or Taxes?***

The role for local taxes is to fund those services whose collective benefits are enjoyed by the residents of the local community. The question, then, is ‘which tax’ or ‘which taxes’?

The strongest economic and fiscal arguments for assigning a tax or taxes to local governments come from the literature on fiscal federalism where there is wide spread agreement on general principles that should be followed. In short, this theory prescribes a limited tax base for local governments.<sup>65</sup> The best taxes are those that are based on an immobile tax base and therefore, borne primarily by local residents (not exported); that do not create problems with harmonization or harmful competition between local governments or local governments and more senior levels of government; that generate sufficient, stable and predictable revenues; that are visible to ensure accountability and transparency; that are perceived to be fair; and are easy to administer locally.<sup>66</sup>

Here, there is a strong defense for using property taxes.<sup>67</sup> First, the tax base is largely

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<sup>64</sup> Kitchen (2001), supra footnote 1.

<sup>65</sup> Charles, E. McClure Jr. (2001), “The Tax Assignment Problem: Ruminations on How Theory and Practice Depend on History.” *National Tax Journal*, Vol. LIV, No. 2, 339-363.

<sup>66</sup> Bird and Slack (2004), supra footnote 44, at 30; Bird (2001), supra footnote 52; Richard M. Bird (1999), “Rethinking Tax Assignment: The Need for Better Subnational Taxes”, draft paper, Fiscal Affairs Department, (Washington: International Monetary Fund); and Wallace E. Oates (1998), “Federalism and Government Finance”, in Wallace E. Oates (ed.), *The Economics of Fiscal Federalism and Local Finance* (Cheltenham, UK: An Elgar Reference Collection).

<sup>67</sup> A discussion in support of property tax funding for local public services that provide benefits of a collective nature to the local community is found in John Bossons, Harry Kitchen, and Enid Slack (1993), “Local Government Finance: Principles and Issues”, an unpublished paper for the Ontario Fair Tax Commission, Toronto; Almos Tassonyi (1993), “The Benefits Rationale and the Services Provided by Local Governments”, an unpublished paper for the Ontario Fair Tax Commission, Toronto; Paul A.R. Hobson (1997), “Efficiency, Equity and Accountability Issues in Local Taxation” in *Urban Governance*

immobile - the residential portion cannot be exported and therefore, it is relatively efficient because distortions in economic behaviour are minimized.<sup>68</sup> Second, it is effective in funding, partially at least, those services whose collective benefits accrue to the local community; hence, it satisfies the benefits received criteria. Third, its high visibility helps to ensure that local governments work in an accountable, transparent, and efficient manner. Fourth, given that no single tax or two taxes are deemed to be entirely fair and distortion free, there is considerable merit in a state or national tax system that employs a mix of taxes including a local property tax.

Critics of the property tax have argued that it is difficult to administer, especially if the tax base is property value and a proper functioning real estate market does not exist. As well, it is a poor tax when it comes to taxing commuters and visitors, and it is not revenue elastic. In some countries where property taxes have been the backbone of local finance, there is increasing concern as to whether or not it can continue as the only major tax available to local governments if the latter are to be fiscally sustainable.

The property tax that is most frequently defended, because it is used in this way in most developed countries, is one that is based on market values.<sup>69</sup> But this need not be the case. It is just as defensible to support a local property tax that is based on unit-value or area assessment. Here, the tax base could be a combination of building area and lot area. For each property, assessed value is the sum of lot area times an assessment rate per square metre plus the building area times an assessment rate per square metre of building area.<sup>70</sup>

Unit value has been used in Israel and in Rotterdam. It is also used in some economies in transition<sup>71</sup> (Poland and Ukraine, for example) where the absence of developed property or real estate markets makes it difficult to determine market value (Estonia, Poland, Czech Republic, Slovakia, Russia, and Armenia, for example).<sup>72</sup> Similarly, it may make sense to use it in isolated hamlets or communities where there is no clearly functional market for property values because the government owns most of the housing and rents it to occupants.<sup>73</sup>

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*and Finance: A Question of Who does What*, edited by Paul A.R. Hobson and France St-Hilaire (Montreal: The Institute for Research on Public Policy), 113-131 at 117-118; and Harry M. Kitchen (2002), *Municipal Revenue and Expenditure Issues in Canada* (Toronto: Canadian Tax Foundation), chapters 3 to 5.

<sup>68</sup> McClure (2001), supra footnote 65.

<sup>69</sup> For a discussion of property tax implementation issues, see Harry Kitchen (2003) "Property Taxation: Issues in Implementation", a paper prepared for the Consortium for Economic Policy Research and Advice (CEPRA) (Ottawa: Association of Universities and Colleges of Canada), 37 pages.

<sup>70</sup> Harry Kitchen (1989), "Alternative Methods of Taxation and Assessment", a report prepared for the Task Force on Reassessment in Metropolitan Toronto (Toronto: City of Toronto), part VII.

<sup>71</sup> Jane Malme and Joan Youngman (2001), *The Development of Property Taxation in Economies in Transition*, (Lincoln Institute of Land Policy).

<sup>72</sup> Joan Youngman and Jane Malme (2000), *An International Survey of Taxes on Land and Buildings* (Netherlands: Kluwer Law and Taxation Publishers), at 18.

<sup>73</sup> Harry Kitchen and Enid Slack (2002), "Providing Public Services in Remote Areas", (Washington: World Bank Institute) at 9, available at [[www.worldbank.org/wbi/publicfinance/decentralization/fiscalfederalism\\_Russia.htm](http://www.worldbank.org/wbi/publicfinance/decentralization/fiscalfederalism_Russia.htm)]

Other taxes have also been defended at the local level, even though they are generally less effective at satisfying the criteria for a good local tax. These include an income tax on individuals, some type of consumption based tax that could include a general sales tax, a hotel and motel occupancy tax, an automobile fuel tax, and a local automobile registration tax. The only local tax currently used, by itself, in place of the property tax is a local income tax. Support for it is generally based on the following arguments.

First, it is more progressive than the property tax in its distributional impact on local taxpayers. Second, its use would permit local governments to cast a wider net in capturing revenues from those who benefit from municipal services - residents, commuters and visitors and as such, would be preferable for metropolitan areas than for local municipalities. As noted above, a key tenet of the benefits model of local government finance is that those who enjoy the benefits of local services should pay for them. Recent evidence from the United States suggests that the cost of inner city services used by people who live in the suburbs and commute to work (in the city centre) exceeds, sometimes substantially, the taxes they pay for inner city services.<sup>74</sup> For these services, an income tax and even a sales taxes could be more effective at linking the costs and benefits of services than the property tax. Third, it is more revenue elastic than the property tax – a useful feature for local governments faced with increasing cost of local services. Fourth, it may be administratively easier for local governments in some countries to piggyback onto the state income tax than it would be to set up a new locally administered property tax system.

Many local governments in the countries summarized in this paper (Tables 1 and 2) currently rely on more than one local tax. In addition to the comments in the preceding paragraph, there are solid arguments for a mix of local taxes especially for metropolitan areas.<sup>75</sup> First, any single tax like the property tax is almost certain to create local distortions, some of which could be offset by other taxes. For example, the property tax may discourage investment in housing. A personal income tax, on the other hand, may encourage investment in owner-occupied housing because the imputed income of owner-occupied housing is not taxed. By relying on a number of different tax sources, there is the possibility that the distortions in one tax could be counteracted by the distortions in other taxes.

Second, additional tax sources would make the overall local tax structure more flexible, thus permitting local governments to choose taxes that fit local conditions and circumstances. For example, sales taxes might be chosen in situations where the benefits of services are enjoyed by commuters and visitors. Property taxes might be chosen where there is a need for a stable revenue source.

Third, additional tax sources could increase the revenue elasticity of the local tax base and allow it to adapt more easily to rising costs and service demands. The property tax is not an elastic source of revenue because it does not increase very quickly in times of economic growth (or decrease very quickly in time of economic slowdown). Other tax sources (such as

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<sup>74</sup> Howard Chernick and Olesya Tkacheva (August 5, 2002), “The Commuter Tax and the Fiscal Cost of Commuters in New York City” *State Tax Notes*, Vol. 25, No. 6, August 5, 2002, at 451-456; and Howard Chernick, “The Effect of Commuters on the Fiscal Costs of the District of Columbia” (December 2002), mimeograph, 36 pages.

<sup>75</sup> Rodgers and Temple (1996), *supra* footnote 57, at 229.

sales and income taxes) are more elastic sources of revenue and would allow municipalities to benefit from economic success and to share in economic failure.

Fourth, access to other tax sources may permit local governments to avoid large property tax increases. Politically, this can be attractive given the extent to which increases in property taxes are highly visible and often unpopular with local taxpayers.

In general, arguments for more than one tax at the local level are particularly strong for large cities and city-regions, particularly when tax rates are set locally. Large cities and city-regions would be able to collect considerable revenues from these sources.

## **2. *Who Should Set Local Tax Rates?***

International experience tells us that local governments are more responsible, efficient and accountable if they are required to fund their expenditures from locally generated revenues. This includes setting local tax rates. Additional autonomy could also be achieved if local governments were free to establish and determine their local tax base, however, high administrative costs of doing so generally argue against it. For income and consumption based taxes, it is far less expensive to piggyback onto an existing state tax with local governments setting the local tax rate. For property taxation where a senior level of government is not involved, local administration will be necessary.

For two-tier local governments or large metropolitan governments where local councils are responsible for a range of services and the upper tier or metropolitan council (that encompasses a number of lower tiers) is responsible for services that spill over the local boundaries, the lower tier should set its own tax rates and the upper tier should set its tax rates. This follows the principle that those who spend the money should be responsible for raising it.

The practice of having each level of municipal government set its own property tax rate on the same property tax base is common in Canada. In some states in the United States, the application of a local sales tax or income tax to the same tax base as used by the state is also common practice. These examples suggest that it is not uncommon for different levels of government to impose different tax rates on the same tax base. Nor does it follow that the level of government that sets the tax rate need collect the tax revenue. Returning to the Canadian experience, let us consider the province of Ontario. Here, all regional (like a metropolitan level of government) and county governments (upper tier) set their own taxes independently of the tax rates set by the local municipalities (lower tier). The local municipalities, however, send out combined tax bills and collect both upper and lower tier taxes. This practice has been around for years and has been fiercely defended in the presence of a number of proposals to migrate tax billing and collection to the upper tier where cost savings could be achieved because of distinct economies of scale that are present in this operation.<sup>76</sup> Tax billing and collection is an administrative function and has nothing to do with policy setting or decision-making; hence, there is no reason why billing and collection needs to rest with the taxing jurisdiction that sets the tax rate.

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<sup>76</sup> W. Douglas Armstrong and Harry Kitchen (1997), *Peterborough County/City Municipal Review: Final Report*, (Peterborough: Joint Restructuring Steering committee), pp. 125-127.

### **3. *Should Local Tax Rates Be Uniform Or Differentiated Across A Municipality?***

Given that local governments should be responsible for setting their own tax rates, there is a question of whether or not these rates should be uniform throughout the entire jurisdiction or whether they should be differentiated across property types and geographical areas within the jurisdiction. Whether a tax should be differentiated or not may also depend on the type of tax or the way it is administered.

Under benefits based taxation, individuals and businesses that benefit from local public services should pay for them. Where these benefits vary by individual, by property type, or by area of the municipality, a case exists for charging differential taxes to the extent that it is possible.

For a local tax, such as the property tax, differential tax rates are justified on a number of grounds.<sup>77</sup> First, they are fair on the basis of benefits received as long as the tax rate is set to capture the cost of municipal services used up by different property types or property location. Second, they are efficient if they reflect differences in the cost (production, environmental and social) of delivering services to different property types. In other words, if some properties or property types are more expensive to service, a case can be made for differential property tax rates. Failure to correlate benefits from local government services, as they are reflected in effective property tax rates, with the extra cost of services consumed (or an approximation of it) leads to a redistribution of income that is not neutral. If the effective tax rate exceeds the extra cost of delivering the service, incentives exist for people or businesses to relocate to lower taxed areas unless they are willing to accept lower property values. Third, variable tax rates have a further advantage in that they could be used to distort decisions deliberately to achieve certain municipal land use objectives. For example, if higher tax rates slow development and lower tax rates speed up development, a deliberate policy to develop certain neighbourhoods instead of others might be achieved through different tax rates for different locations.

Variable property tax rates have recently grown in popularity in some jurisdictions; for example, municipal governments are now permitted to use variable property tax rates in three Canadian provinces - British Columbia, Alberta, and Ontario. Variable tax rates may also be achieved by applying the general property tax rate to one or more groups of properties (certain neighbourhoods or downtown business area, for example) whose assessments have been increased because these properties receive additional municipal services. Special assessments and special area financing are common in some municipalities; for example, the city of Halifax in the Province of Nova Scotia in Canada has over 60 such areas with different rates.

Differentiated local income tax rates are not common, but they do exist in a few cities in the United States. Use of two different rates can be justified on benefit grounds. Those who work and live in the same city benefit from city services and should pay for them. Those who work in one city and live in another community still benefit from some of the former city's services – local roads and streets, sidewalks, police and fire protection and so on. For this,

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<sup>77</sup> Enid Slack (2002), "Property Tax Reform in Ontario: What Have We Learned?" *Canadian Tax Journal*, Vol. 50, No. 2, 576-585; and Kitchen (2002), *supra* footnote 8.

they should also pay a tax, although probably at a lower rate than the tax on residents. In cities where split rates are used, the practice is to impose a lower rate of income tax on commuters (those who work in the taxing jurisdiction but live elsewhere) and a higher rate on residents. Here, it should be noted that New York City in 1999 dropped its income tax on commuters in spite of solid analytical and empirical support for continuing with it.<sup>78</sup> The administration of split rate local income taxes is fairly straight-forward. The employer withholds the tax and remits it to the government. The employer also knows the residence of all employees and could apply the rates accordingly.

For consumption-based taxes, however, differentiated tax rates are not administratively possible. A local sales, fuel or hotel and motel occupancy tax, for example, is collected by the vendor. The vendor could not be expected to charge different rates to different customers on the basis of residency or some other characteristic of the customer.

#### ***4. Should Local Tax Rates Be Regulated?***

Regulation of local tax rates may depend on the type of tax used and the role it plays within a country. If local governments use taxes that are only in their domain (property tax, for instance) and if their tax rates are set to generate required revenues for funding local services, there are no solid economic or political arguments for regulating the general tax rate. In democratically elected local councils where all decision-making responsibilities rest with local councils, citizens/taxpayers have the ultimate control or power over council's tax decisions – the opportunity to vote the politicians out at the next election.

If, however, local governments share the tax base with a senior level of government, yet have the power to set their own rates (which they should, as was argued earlier), there may be a case for regulation if the rate setting action of local government creates spillover or externality problems for other governments. For example, if state or central and local governments have access to the same income tax or sales tax system and if the senior level of government lowers tax rates to achieve important state or national goals (to foster economic growth or to enhance competitiveness, for example), they may wish to regulate what local governments do to prevent the latter from increasing its tax rates to take up the vacated tax room. While regulation here would be justified, significant funding problems may still exist for local governments that need tax revenue to meet expenditure needs.

A further externality argument for regulation arises in instances where local governments tax businesses. If the local tax on business is set to recover the cost of services used, it is efficient, fair and accountable. The practice in many countries, however, is for local taxation to overtax business, thus creating potentially serious economic problems for the entire state or country. To prevent harmful and serious consequences, there may be a case for some state regulation.<sup>79</sup> This is discussed in more detail below under the taxation of businesses.

Regulation has also been defended as a way of controlling local government service costs. Cost efficiency in service provision, however, is more effectively achieved through the

<sup>78</sup> Chernick and Tkacheva, (2002), supra footnote 74.

<sup>79</sup> Bird and Slack (2004), supra footnote 44, at 38-40; Richard M. Bird and Thomas A. Wilson, (2003), "A Tax Strategy for Ontario", research paper 32 prepared for the Panel on the role of government in Ontario, available at [<http://www.law-lib.utoronto.ca/investing/index.htm>]

introduction of competitive elements in the production and delivery of each public good and service,<sup>80</sup> not through regulating tax rates.

### 5. *Should Local and Metropolitan Governments Tax Business?*

A common tendency in virtually every country is for local and metropolitan governments to tax businesses. Depending on the country, this may include a property tax on commercial and industrial properties, a tax on capital, a corporate income tax and a range of other industry and commerce taxes.<sup>81</sup> The strongest economic argument for local taxation of commercial and industrial properties is to tax them in order to recover the cost of local public services that they use. Where specific beneficiaries of these services can be identified, user charges are preferred. Where user charges are not possible, some general tax levy may be appropriate as long as is on a relatively immobile tax base with limited opportunities to export the tax to other jurisdictions.

Local government taxation of commercial and industrial property is almost never efficient or fair. For example, in countries with a fully developed property tax system, higher taxes - either through assessment differentials or differential tax rates - are almost always imposed on non-residential properties when compared with residential properties. This practice is inefficient because property taxes from non-residential properties are used to subsidize services consumed by the residential sector. Since service levels in any municipality are driven primarily by the demands of the residential sector (they vote), their subsidization means that the residential tax rate will be less than it would be in the absence of the subsidy and an oversupply of municipal services could follow. Equity is not achieved either if those benefiting from the services are not paying full costs.

This heavy taxation of the non-residential sector has been addressed in at least four Canadian studies that compared the property tax paid by non-residential properties with the cost of municipal services consumed by these properties. All studies<sup>82</sup> found that the residential sector when compared with the non-residential sector is the recipient of proportionately more benefits from local government services (social services, elementary and secondary education, libraries, recreational facilities, etc.). When combined with higher effective property tax rates paid by the non-residential sector, the studies concluded that the commercial/industrial sector is over-taxed and the residential sector under-taxed. Beginning in 1995, the local council in the City of Vancouver (Canada) shifted, over the ensuing five years, some of its tax burden from the commercial and industrial sector onto the residential sector. More recently, the provincial government in Ontario announced that tax increases

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<sup>80</sup> Kitchen (2004), *supra* footnote 46.

<sup>81</sup> Richard M. Bird (2003), "A New Look at Local Business Taxes", *Tax Notes International*, vol. 30, No. 7, at 695-711; and Giancarlo Pola, ed. (1991), *Local Business Taxation: An International Overview* (Milano: Vita e Pensiero).

<sup>82</sup> Harry M. Kitchen and Enid Slack (1993), *Business Property Taxation, Government and Competitiveness Project Discussion Paper no. 93-24* (Kingston, Ont.: Queen's University, School of Policy Studies); KPMG, "Study of Consumption of Tax Supported City Services", a report for the City of Vancouver, mimeograph, 1995; MMK Consulting Inc. (2004), "Consumption of Tax Supported Municipal Services in the City of North Vancouver for the 2003 Tax Year" and "Consumption of Tax Supported Municipal Services in the District of North Vancouver for the 2003 Tax Year" - both reports were prepared for the North Shore Waterfront Industrial Association..

beyond the range of fairness<sup>83</sup> (established as a standard that is defined by taking the ratio of commercial/industrial taxes to single dwelling residential property taxes) must be imposed on the residential sector and not on the commercial/industrial sector.

A recent study in the United States found similar results. Specifically, it was estimated that the ‘business related’ share of combined state and local expenditures in the United States is about 13 percent, although there is considerable variation from state to state.<sup>84</sup> These businesses, however, pay proportionately more of the state and local taxes.

Further concerns with this heavy taxation of the non-residential sector arise because this tax represents a fixed charge that the business must pay. This, by the way, is the same criticism that is directed at capital taxes. Both taxes are fixed in the sense that they are unrelated to the value of municipal services consumed or profits earned. As long as the tax rate is more than necessary to cover the cost of the last unit of municipal services consumed or if there are no economic rents for it to capture, resources will be allocated inefficiently. This over-taxation of the non-residential sector may lead to less economic activity, lower output, fewer jobs and a less competitive business environment.<sup>85</sup>

There is also an issue of whether taxes on non-residential properties play a role in location decisions. Since firms and businesses generally locate where they can maximize profits, the provision of fiscal inducements such as lower property taxes can influence a firm’s location decision in the same way as the reduction in other production costs may play a role. The impact of property tax differentials depends on a number of factors including the size of the differential between competing municipalities and whether this differential is sufficient to offset differentials in other costs or market factors.

While it is uniformly accepted that the cost of doing business is an important factor in location decisions, there is less consensus on the role played by property taxes in this decision. The evidence, most of which is drawn from the United States, suggests that property tax differentials are relatively unimportant in inter-municipal or inter-regional location decisions but do play an important role in intra-municipal or intra-regional location decisions.<sup>86</sup> In other words, property tax differentials are unlikely to affect a firm’s decision to locate in a specific metropolitan area, but once it has decided to go there, property taxes may play a role in where it locates within that area. To this extent, higher effective tax rates on commercial and industrial properties in one municipality within a region or area when compared with neighbouring municipalities create an incentive for firms and businesses to locate in the lower taxed municipalities. In the extreme, one might expect these property tax differentials to produce a heavy (why not all) concentration of all firms and businesses in the lower taxed jurisdictions. In other words, intramunicipal tax competition could be potentially

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<sup>83</sup> For a discussion of this, see Kitchen (2002), *supra* footnote 8, at 108-109.

<sup>84</sup> William H. Oakland and William A. Testa, “Community Development-Fiscal Interactions: Theory and Evidence from the Chicago Area”, Working Paper Series No. 16 (Chicago, IL: Research Department: Federal Reserve Bank of Chicago).

<sup>85</sup> *Report of the Technical Committee on Business Taxation* (April 1998), (Ottawa: Department of Finance) at chapter 2.

<sup>86</sup> Kitchen and Slack (1993), *supra* footnote 82. Similar comments were made by officials of the Greater Toronto Marketing Agency in December of 2000.

destructive if it led to a race to have the lowest tax rates. A recent study on municipalities in British Columbia examined this issue and concluded that while there is some evidence that municipalities react to tax increases of their neighbours, there is no widespread destructive competition for capital.<sup>87</sup> Similar studies in the United States, however, have concluded that property tax competition among neighbouring municipalities is much more prevalent and wide spread.<sup>88</sup>

In reality, the extent to which firms and businesses respond to tax differentials depends on many factors. These include, for example, the importance of being in the core of the region or area for business reasons; the opportunity to shift the tax differential on to consumers (of the final service or product), employees and owners; and the enhanced amenities that may be offered by a 'downtown location.'

In a United States study of individual office buildings in downtown Chicago, it was found that 45 percent of property tax differentials were shifted forward onto tenants as higher gross rents per square foot and 55 percent were borne by owners.<sup>89</sup> Some firms are apparently willing to pay a premium to locate in the downtown core. This suggests that those firms benefit from 'economic rents' created by that location; large financial institutions, for example, may benefit from a downtown location. Taxing these rents is efficient from an economics standpoint because it will not impact on the location decision. It is difficult to know, however, the extent to which economic rents exist. In other words, it is difficult to know at what level of rent (or property tax) a firm will choose to move out of the downtown location.

There is at least one more positive effect that could arise from shifting the tax burden away from the non-residential sector.<sup>90</sup> Reducing the property tax burden on this sector would reduce the potential for exporting<sup>91</sup> the tax to non-residents, thus leading to an improved allocation of resources and an increase in local accountability. Tax exporting refers to situations in which some portion of the burden of a tax is borne by non-residents either through changes in relative commodity prices or in a change in the net return to non-locally owned factors of production (inputs in the production process). For example, if higher effective tax rates on commercial and industrial properties lead to relatively higher prices charged on the sale of that community's exports (to other communities), the taxing jurisdiction will have effectively shifted part of its tax burden onto residents of other

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<sup>87</sup> Craig Brett and Joris Pinkse (2000), "The determinants of municipal tax rates in British Columbia", *Canadian Journal of Economics*, vol. 33, no. 3, 695-714.

<sup>88</sup> Jan K. Brueckner and Luz A. Saavedra (2001), "Do Local Governments Engage in Strategic Property-Tax Competition?" *National Tax Journal*, Vol. LIV, No. 2, 203-229.

<sup>89</sup> McDonald, John F. (1993), "Incidence of the Property Tax on Commercial Real Estate: The Case of Downtown Chicago", *National Tax Journal*, 109-120.

<sup>90</sup> Sylvester Damus, Paul Hobson and Wayne Thirsk (1987), *The Welfare Effects of the Property Tax in an Open Economy*, Discussion Paper No. 320 (Ottawa: Economic Council of Canada); and Shantayanan Devarajan, Don Fullerton, and Richard A. Musgrave (April 1980), "Estimating the Distribution of Tax burdens: A Comparison of Different Approaches," *Journal of Public Economics*, 155-82.

<sup>91</sup> Of course, the ability of a firm to export will depend on the elasticity of demand for the exported product.

communities. If the non-residential tax in every jurisdiction is exported to some extent, those jurisdictions exporting relatively more of the non-residential property tax will be better off than those jurisdictions exporting relatively less. In particular, if the burden of this tax is shifted from residents of high income jurisdictions to those of low income jurisdictions, the distribution of income among jurisdictions is worsened. Furthermore, this may run counter to state/provincial equalization schemes that are aimed at redistributing resources (income) from relatively high income jurisdictions to relatively low income jurisdictions. The limited evidence on tax exportation at the municipal level in Canada suggests that relatively rich municipalities have relatively high exporting rates whereas relatively poor municipalities have relatively low tax exporting rates.<sup>92</sup> This is an implicit transfer from relatively low income municipalities to relatively high income municipalities.

Furthermore, when the commercial/industrial sector exports its tax burden, municipal government accountability is weakened because the direct link between the government responsible for local services and the ultimate person/agency/body paying the tax is missing.

Concern over the kinds of distortions created by the non-residential property tax has prompted at least one suggestion for reform.<sup>93</sup> Specifically, it has been argued that revenues from a portion (the amount that exceeds the funds necessary to cover the cost of local services consumed) of the non-residential property tax should be replaced with revenues from a new business value tax (BVT). This would be a value-added tax. It would be levied on business income; that is the sum of profits and wages (or investment and consumption). It would fall on production and not on consumption. Thus, it would be an origin based, rather than destination based tax and would better meet the benefits criteria for a local tax. It would be assessed by the subtraction method on the basis of annual accounts rather than on a transaction or invoice credit method.<sup>94</sup>

As a value-added tax (essentially, a base that is sales less cost of goods purchased), a BVT would be more neutral (not distort investment decisions) than most existing local business taxes and it should be less susceptible to base erosion than most other forms of business taxation. Municipalities would be able to set local rates, although the province or state might impose limits on local surcharges to prevent excessive tax exporting (by setting a ceiling rate) and 'beggar-my-neighbour' policies (by setting a minimum rate). Such restraints are to prevent harmful competition created by the offer of fiscal incentives to attract firms and businesses to one area as opposed to another area<sup>95</sup> and thus, distort location decisions.

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<sup>92</sup> For elaboration on this, see Wayne R. Thirsk, (1982) "Political Sensitivity Versus Economic Sensibility: A Tale of Two Property Taxes," in Wayne R. Thirsk and John Whalley, eds., *Tax Policy Options in the 1980s* Canadian Tax Paper no. 66 (Toronto: Canadian Tax Foundation) 384-400.

<sup>93</sup> Bird and Slack (2004), supra footnote 44; Bird and Wilson (2003), supra footnote 79; and Richard M. Bird and Jack M. Mintz (2000), "Tax Assignment in Canada: A Modest proposal" in Harvey Lazar, editor, *Canada: the State of the Federation 1999/2000*, (Kingston: Queen's University, Institute of Intergovernmental Relations) at 261-292.

<sup>94</sup> Bird and Slack (2004), supra footnote 44, at 39.

<sup>95</sup> Ibid, at 39-40.

While many technical difficulties would have to be worked out before implementation, moving towards a local business tax of the BVT type would be an improvement. Italy<sup>96</sup> has done this recently and Japan will do it in 2004.

As for a local corporate income tax or local capital tax, there is no sound economic justification. Capital is highly mobile and the tax is almost certain to be exported, thus making it an unsatisfactory tax for local governments.

## **6. *Should Local and Metropolitan Governments Have Different Taxes?***

From our earlier discussion, the answer may be apparent. In principle and practice, local and metropolitan governments could both have access to the same tax or they could have access to different taxes. It depends on the types of services for which each of these governing units is responsible. If local governments provide services that benefit their own residents, do not generate spillovers or externalities, that are non-income redistributive in nature, the property tax is probably the best tax although it could be supplemented by another tax or taxes. It is on local people and pays for local services. Indeed, the same may be said for metropolitan governments if their services have the same characteristics.

In reality, metropolitan governments are closer to those of provinces and states in terms of the services they provide and as such, are better candidates for a wider range of taxes when compared with local governments.<sup>97</sup> They are often called on to address poverty, crime, social housing and social assistance, land use planning, regional transportation, and other region-wide needs. Here, an income tax would appear to be an appropriate revenue source either by itself or as a supplement to the property tax.

An additional justification for income taxes for metropolitan areas has been made on benefit grounds. Since large metropolitan areas have a more heterogeneous population, it has been suggested that income is more highly correlated with consumption of public services than it is with property values. In this sense, a local income tax may be a better benefit tax than a property tax in large metropolitan areas.<sup>98</sup> This argument would not apply, however, if there is a strong relationship between income and property values, which may be the case in large cities in many developing countries.<sup>99</sup>

Finally, if either local or metropolitan governments provided services that are used by non-residents, a case exists for giving these governments access to one or more consumption-based taxes.

## **D. *Grants from Senior Governments***

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<sup>96</sup> Massimo Bordignon, Silvia Gianni, and Paola Panteghini (2001), "Reforming Business Taxation: Lessons from Italy?" *International Tax and Public Policy*, vol. 8, at 191-210.

<sup>97</sup> Bird (2003), *supra* footnote 43.

<sup>98</sup> David Nowlan (1994), "Local Taxation As An Instrument of Policy", in Frances Frisken (ed.), *The Changing Canadian Metropolis: A Public Policy Perspective*, volume 2, (Berkeley: Institute of governmental Studies press, University of California).

<sup>99</sup> Bird and Slack (2004), *supra* footnote 44, at 34.

As noted in section A.1, grants from senior levels of government often play a role in funding local and metropolitan services. Indeed, they must because few countries permit local and metropolitan governments to levy taxes that yield sufficient revenues to meet expenditure needs.<sup>100</sup>

Conditional grants may be appropriate for partial or full funding of services generating spillovers and for services in which the donor government has an interest (to ensure uniform or minimum standards, for example). Unconditional grants play a role in filling the fiscal gap (mismatch in local own source revenues and expenditure responsibilities) and in supporting municipalities in their attempts to provide comparable levels of service for comparable tax rates (equalization).<sup>101</sup> In this context, metropolitan areas could be less dependent on grants than local governments. Metropolitan areas are better able to internalize externalities and they have a more diverse tax base from which to generate locally raised revenues. In fact, the creation of a single tier government in Cape Town, South Africa in 2001 was primarily designed to internalize the externalities created by a number of contiguous municipalities<sup>102</sup> and to avoid the need for intergovernmental grants.

If grants are used for more than the rationale in the preceding paragraph, problems often emerge.<sup>103</sup> First, transfers can distort local decision-making if they encourage recipient municipalities to spend in areas that may not be a local or metropolitan priority.

Second, grants may be viewed as ‘free’ money by the recipient governments and if so, they may work against the implementation of proper pricing policies for municipal services.<sup>104</sup> Third, transfers may encourage people to stay in communities at risk because they may prop up communities that simply cannot survive on their own. Some small, rural, and remote communities, for example, may be unable to provide adequate levels of service at reasonable tax rates<sup>105</sup> or at reasonable user fees.

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<sup>100</sup> Richard M. Bird (2001), “Setting the Stage: Municipal and Intergovernmental Finance”, in *The Challenge of Urban Government: Policies and Practices*, edited by Mila Freire and Richard Stren (Washington: The World Bank) at 114.

<sup>101</sup> Harry Kitchen (2000), “Municipal Unconditional Grant and Governance Models: A Review and Evaluation”, a paper prepared for the Ontario Ministry of Finance (Toronto: The Ministry), 50 pages.

<sup>102</sup> Philip Van Ryneveld and Michael Parker (2002), “Property Tax Reform in Cape Town”, in Michel E. Bell and John H. Bowman, eds, *Property Taxes in South Africa: challenges in the Post-Apartheid Era* (Cambridge, MA: Lincoln Institute of Land Policy), at 157-173.

<sup>103</sup> A similar discussion on the problems of grants in funding capital projects is provided in Kitchen (2004), *supra* footnote 3, at 17-19.

<sup>104</sup> Harry Kitchen (2003), “Physical Infrastructure and Financing”, research paper 44 for the Panel on the Role of government in Ontario, available at [<http://www.law-lib.utoronto.ca/investing/index.htm>]

<sup>105</sup> For a detailed discussion of the challenges facing these communities and the appropriate role for government, see Enid Slack, Larry Bourne and Meric Gertler (2003), “Small, Rural and Remote Communities: The Anatomy of Risk,” research paper 18 prepared for the Panel on the Role of Government in Ontario, available at [<http://www.law-lib.utoronto.ca/investing/index.htm>]; and Kitchen and Slack (2002), *supra* footnote 73.

Fourth, transfers reduce accountability. When two or more levels of government fund the same service, accountability problems arise. When the level of government making spending decisions (municipalities) is not the same as the level of government that raises the revenues to pay for them (a more senior level of government), accountability is blurred. As noted earlier, international experience tells us that governments are more likely to carry out their operating and capital expenditure responsibilities in a responsible, efficient, transparent, and accountable manner if they are also responsible for raising their own revenues to pay for these services.<sup>106</sup>

Economic arguments in support of grants are often not strong. Their use, where they are prevalent, should be conditional on recipient governments setting efficient user fees, prices and local taxes for services provided by the funded or partially funded physical infrastructure.<sup>107</sup>

### **E. Fiscal Sustainability**

Recent trends around the world to decentralize additional funding requirements from central and state/provincial/regional governments to city and metropolitan governments without corresponding grant support or additional local tax room have raised the question of whether the latter can be fiscally sustainable in the future. This new fiscal environment has emerged at the same time as cities and metropolitan areas have become increasingly important in the competitive global economy. Cities and metropolitan areas are the major incubators of economic prosperity<sup>108</sup> and the quality of urban life has become a prime determinant of location decisions. Growing and expanding businesses engaged in national and international activities locate in cities and metropolitan regions where they have access to a highly qualified workforce (knowledge workers) as well as access to business services, transportation and communications networks. Local and metropolitan governments, in providing goods and services and in financing them, play an important role in attracting and retaining businesses. The provision of local public goods and services affects the quality of life and influences where people live and invest, and where businesses locate. The quality of the school system, cultural and recreational facilities, physical infrastructure, social services and the range of housing choices are important factors.

This growing importance of municipal government raises the question of whether they have adequate fiscal tools or levers to fund necessary local services and facilities. To thrive financially, local governments must have the capacity to generate sufficient revenues to meet their expenditure needs, obligations and commitments. This is affected by at least three things.<sup>109</sup>

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<sup>106</sup> Richard Bird (2001), *supra* footnote 52.

<sup>107</sup> Kitchen (2003), *supra* footnote 104.

<sup>108</sup> Michael Cohen (2001), "The Impact of the Global Economy on Cities", in *The Challenge of Urban Government: Policies and Practices*, edited by Mila Freire and Richard Stren (Washington: World Bank Institute), 5-17.

<sup>109</sup> Harry Kitchen (2002), "Canadian Municipalities: Fiscal Trends and Sustainability", *Canadian Tax Journal*, Vol. 50, No. 1, at. 156-180.

- The cyclical sensitivity of local government funding responsibilities - do expenditure programs vary with the growth or slow down in economic activity (social services, social housing, for example)?
- The capacity of the local revenue base and local taxes to keep pace with expenditure responsibilities – is there enough revenue elasticity in the local tax base to permit revenues to rise and fall with expenditure requirements?
- The ability of local governments to control their own destiny – do local governments have sufficient control over their expenditure responsibilities and revenue sources to meet changing fiscal circumstances?

The extent to which local and metropolitan governments meet these conditions varies. In general, one can state that local and metropolitan governments should only be responsible for funding those services that benefit residents of their jurisdiction. All income redistributive services, services that generate spillovers and those in which there is a state or national interest should be funded by more senior levels of government. As well, local governments should have access to revenue sources that are elastic enough to provide them with the necessary revenues, without imposing undue tax burdens, to meet their local and metropolitan expenditure commitments.<sup>110</sup> Finally, they should have the power and freedom to meet the demands of their constituents without unnecessary tax restrictions and regulations.

## **F. Summary**

The major revenue sources of local and metropolitan governments around the world come from user fees, local taxes and grants. User fees are fair, efficient and accountable for financing those services where individual beneficiaries are identified, where non-users can be excluded and where the per unit cost of provision can be estimated. Current practice in setting user fees, however, often deviates from that which is fair, efficient and accountable. The tendency is to set fees to generate revenue rather than to allocate resources into their most efficient use.

Ultimately, the objective in setting correct fees should be to establish a clear link between services received and fees paid. This is relatively easy for water and sewers, public transit and transportation, public recreation, libraries, solid waste collection and disposal where pricing structures could take into consideration cost differentials attributed to such things as distance from source and peak period use. While economic arguments in support of user fees are persuasive, they have never received much political support. Refusal to introduce efficiency considerations into the pricing structure of most user fees or to entertain in any serious fashion, suggestions for expanding their use has been defended on grounds that they are regressive. This claim, however, is about as relevant as the claim that milk prices and movie tickets are regressive.

There are no definitive conclusions that can be drawn about patterns of local taxation across countries nor can anything be concluded about the appropriateness of one local tax over

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<sup>110</sup> Enid Slack and Richard M. Bird (2004), “The Fiscal Sustainability of the Greater Toronto Area”, International Tax Program Paper 0401(Toronto: Joseph L. Rotman School of Management, University of Toronto).

another. Local governments in some countries rely on property taxes; in other countries, they rely on income taxes; and in still other countries, they rely on a mix of local taxes – property, sales and income. Reliance on a specific tax or taxes is dependent on a number of things including the traditional or historical pattern of taxation in that country; the local government's capacity to administer its own taxes; the types of expenditures that local government must fund; the willingness of state or central governments to assign taxes to local government; the constitutional and legislative requirements within which local governments operate; and a variety of other factors.

What we do know from international experience is that local governments carrying out their expenditure responsibilities are likely to be more efficient, responsible, accountable and transparent if they are required to raise the revenue that they spend. As well, these criteria are more likely to be met if local governments have the fiscal autonomy to determine both their tax base and tax rates without limits on revenue collected, tax base and tax rate. Fiscal autonomy is least when both the tax base and tax rate are set or controlled by senior levels of government. Tax sharing arrangements between local and state/provincial governments also lead to different levels of tax autonomy. Here, the degree of autonomy will depend on whether or not local government consent is required before any change can be made in the tax sharing formula.

Over the past decade or so, local and metropolitan governments, almost everywhere, have faced a similar pattern – declining grants from senior governments, devolution of additional funding responsibilities, and a limited tax base that may not be sufficient to meet future fiscal challenges and objectives. This, in turn, has raised a number of issues around local taxes. In particular, there is ongoing debate over local taxation - is one tax preferred over another? Who should set local tax rates? Should these rates be uniform or differentiated across a taxing jurisdiction? Should local tax rates be regulated? Should local and metropolitan governments tax businesses? Should local and metropolitan governments have different taxes? Are local taxes currently sufficient to ensure local fiscal sustainability?

While answers to the above questions may be long and, at times, convoluted, there is a general consensus that local taxes should only fund those services that benefit the local community; that there is no single tax that is ideal or preferred everywhere – indeed, a mix of taxes may be desirable; that the governing unit that spends tax dollars should be responsible for raising it including setting local tax rates; that differential tax rates should be used to capture differences in the cost of delivering local services; that local tax rates, in general, should not be regulated; that local governments should not overtax businesses as they do in virtually every country; and that senior governments must ensure that local and metropolitan governments have the fiscal tools to ensure fiscal sustainability.

Finally, grants also fund municipal services in most countries, although they tend to be relatively less important for metropolitan areas when compared with local communities. Their use, however, is not always beneficial, especially if they distort municipal spending decisions, lead to incorrect pricing and taxation practices, and reduce local accountability.