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## **Property Tax: A Situation Analysis and Overview**

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#### Introduction

Property taxation is the backbone of municipal finance in most developed countries, and has been for some time. More recently, it has played an increasingly important role in financing local government services in a number of developing and transitional countries. Over the years, and regardless of the country, property tax has not been without convoversy on a variety of issues and it still faces substantial controversy or a number of fronts. Many of these are discussed in this chapter, which is separated into a number of sections. The first lays out the role that property tazes should play in financing municipal services. The second provides data on the relative importance of property taxes as a generator of local revenue in a range of countries. Then we note the base for property taxation in the same countries. The next section covers a number of important and controversial issues in assessment including the identification of property; the importance of establishing uniform assessment practices; the responsibility for assessment; the frequency with which it should take place; the importance of an appeals mechanism; and mass appraisal as an assessment technique. Then we look at a number of issues around property tax rates, in particular, responsibility for setting the tax rate; limits on property tax rates; variable tax rates versus uniform rates; taxation of business properties; exporting the tax on commercial and industrial properties; property taxes and urban sprawl; responsibility for tax billing and collection; and other land and property related taxes used by local governments. Then we turn to the often mentioned and frequently maligned incidence of the property tax and whether property tax relief schemes should be used to remove some of the alleged regressivity of the property tax. The final three sections cover Senior the politics of the property tax; some speculations on the future of the property tax, and a final summary.

#### Role for property taxes

Local governments in every country supply a range of goods and services; from those that exhibit mainly 'private good' characteristics, such as water, sewage, solid waste, electricity, and some recreation, to those that exhibit mainly 'public good' characteristics, such as local roads and streets, street lighting and sidewalks, police and fire protection, neighbourhood parks, libraries, land use planning, sometimes social services and public education. For services with mainly 'private good' characteristics, individual beneficiaries can be identified, income redistribution is not a primary goal, and spillovers are unlikely to exist. For these services, user fees are the most appropriate financing tool. They are relatively easy to administer and, if properly designed, they are efficient, accountable, transparent and fair in their impact on taxpayers.

For services providing mainly collective or 'public good' benefits (specific beneficiaries cannot be identified), user tees are inappropriate. Instead, these should be funded from a local tax incrosed 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.

While there may be some debate over the criteria that should be satisfied in setting a local tax, it is generally agreed that the property tax meets the criteria for a good local tax better than the alternatives of personal income or consumption based taxes. Its tax base is largely immobile. Revenue is generally predictable and stable in that it does not vary with the cyclical swings in economic activity as much as personal income and consumption based tax revenues. The part of the tax that is on residential property is unlikely to be exported. It is highly visible and fair as long is it covers the cost of providing those services that provide collective benefits to the local community. If the property tax is a local tax only (senior levels of government not involved), harmonization problems and wasteful tax competition should not be a problem. A potential downside of a local property tax is that it may be more expensive to administer than other local taxes (income, sales, fuel, for example) that could be 'piggybacked' onto existing federal or regional taxes. This, however, may be a small price to pay if local governments are to have autonomy and flexibility in setting tax policy – important ingredients

of responsible, efficient and accountable local governments (McClure, 2001; Bird, 2001; Bird and Slack, 2004b; and Bird and Bahl, 2008).

#### Importance of the property tax

Today, municipal or local governments in many countries - but not every country - rely on some form of property tax to generate revenues for funding local public services. The relative importance of the property tax, of course, varies from country to country. It depends on the range of services funded by the tax, the distribution of expenditure responsibilities between the local government and the senior levels of government, the relative importance of grants from senior levels of government, the ability of the local government to administer a local tax, and so on. Table 1.1 illustrates the importance of property tax revenues for 25 countries chosen from different parts of the world. In Built Environment Research Institute general, property taxes represent the highest percentage of local revenues in Organization for Economic Co-operation and Development (OECD) and Latin American countries, and the lowest percentage in Asian and central and eastern European countries. Countries in Africa tend to fall between these two extremes.

#### Choice of tax base

There is no uniform property tax base or method of assessment that applies in every country. In some countries, the tax base is land only. In a few countries, only buildings constitute the tax base. In most countries, however, both land and buildings are taxed. For an indication of where each tax base is used and its frequency of use, see Table 1.2 which lists the tax base and method of assessment in the same 25 countries as are reported in Table 1.1.

The basis for assessment is wide-ranging. In some countries, it is based on market value; in others, it is based on site value; and in others, it is rental value. In some countries, the value is based on building area and property area – this is referred to as unit value (Youngman and Malme, 2000). In a few countries, a mix of these approaches is employed. Since these assessment bases are discussed in a separate chapter in this book, they are not discussed in detail here. A simple observation from this comparison is that valued based assessment systems and market value, more specifically, are deemed to be superior to area based systems in countries where there are fully functional property or real estate markets. Here, market values can be determined. Where property or real estate markets are not fully developed such as in developing and transitional economies or where there are a number of impediments to their operation, area based assessment may be preferred. As these countries develop and real estate markets emerge, however, a move to a value based system is often their eventual goal compulsory acquisition.

 Table 1.1
 Reliance on property taxes by local governments

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tax	6.4
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al estate tax, farm land occupation tax	
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and land tax; land development tax	1.4
alue tax on housing; local business taxes	32.0
rates	15.0
property	21.0
	4.0
	32.4
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#### Notes:

Source: Bird and Slack (2004a)

<sup>&</sup>lt;sup>1</sup>Includes only local taxation and not the state tax on land.

<sup>&</sup>lt;sup>2</sup>Includes the local council tax and the local share of national non-domestic rates.

<sup>&</sup>lt;sup>3</sup>Includes other local taxes such as a tourism tax.

<sup>&</sup>lt;sup>4</sup>Percentage of local taxes.

<sup>&</sup>lt;sup>5</sup>This refers only to the municipal tax. There is also a property tax at the provincial level.

<sup>&</sup>lt;sup>6</sup>The property tax is a national tax earmarked for local governments; 40% of revenues remains with municipalities where property is located.

<sup>&</sup>lt;sup>7</sup>Property taxes as a percentage of total Colombian local taxes.

<sup>&</sup>lt;sup>8</sup>Percentage of municipal taxes.

<sup>&</sup>lt;sup>9</sup>The range depends on the state.

Table 1.2 Tax and assessment bases

Country	Tax base	Basis of assessment		
OECD:				
Australia	Land or land and improvements	Market value or rental		
		value or combination		
Canada	Land and improvements	Market value		
	(sometimes machinery included)			
Germany	Land and improvements; farm	Market value (rental		
	properties also include	income/construction		
	machinery and livestock	costs); area in former		
		GDR		
Japan	Land, houses, buildings, and	Market value		
	tangible business assets			
United Kingdom	Land and improvements; some	Market value for		
	plant and machinery	residential; rental value for		
		non-residential		
Central and eastern				
Europe:	~~			
Hungary	Unimproved value (plot tax);	Area or adjusted market		
	buildings (building tax)	value		
Latvia	Land and buildings	Market value		
Poland	Land, buildings and structures	Area		
Russia	Land for land tage structures for	Area; inventory value of		
	property tax; assets for	structures; value of assets		
	enterprise property tax			
Ukraine	Land	Area		
Latin America				
Argentina	Land and buildings	Market value		
Chile	Land and improvements	Area by location for land;		
X		construction value for		
		buildings		
Colombia	Land and buildings	Market value		
Mexico	Land and buildings	Market value		
Nicaragua	Land, buildings and permanent	Cadastral value		
	improvements			
Asia				
China	Occupied land; land and	Area; market value or		
	improvements	rental value		
India	Land and improvements	Mostly annual rental		
		value; limited use of area		
		and market value		
Indonesia	Land and buildings	Market value		
Philippines	Land, building, improvements	Market value		
	and machinery			
Thailand	Land and improvements	Rental value; market		
	(buildings and land tax); land	value		
	(land development tax)			

Table 1.2 (cont'd)

Country	Tax base	Basis of assessment
Africa		
Guinea	Land and buildings	Rental value
Kenya	Land (but can use land and improvements)	Area; market value; or a combination
South Africa	Land and/or improvements	Market value
Tanzania	Buildings, structures or limited development	Market value (or replacement cost, if market value not available)
Tunisia	Land and improvements (rental housing tax); land only (tax on unbuilt land)	Area; rental value

Source: Bird and Slack (2004a)

#### Issues in assessment

Regardless of the assessment base used, its success depends on five critical parts of the assessment process: identifying the property; achieving uniformity in assessment; responsibility for undertaking assessment; frequency of reassessment; and having an effective appeals mechanism. This section concludes with a discussion of an increasingly popular and productive assessment technique – mass appraisal.

#### Property identification

All taxable properties must be identified and described on the assessment roll with each property assigned a roll number. This number is important for linking assessment information with tax billing and property transfer records (Slack, 2001). The assessment roll or fiscal cadastre should include the address of the property, its owner, building and lot size in square metres (feet) or hectares (acres), a definition of property boundaries (using cadastral maps), the age of the building and information on renovations or improvements. This information will be used to assign an assessed value to the property, especially if the tax base is market value and the property has not recently been sold. Furthermore, this information should be reported in a consistent way and a process should be established to update assessment annually or as frequently as administratively possible. Once assessed values have been determined, local tax rates must be set, tax bills issued, responses must be made to assessment appeals, taxes must be collected, and arrears must be addressed.

Property identification is often difficult in developing countries and transitional economies (Dillinger, 2002; and Malme and Youngman, 2000). For example,

maps for property identification may not exist; property ownership data may not be provided because of disputes over who owns what; information on improvements may be missing; building permit information may not be provided to the taxing authority; tax records may be identified by taxpayer and not by property; land and building records may be maintained by different agencies and not linked; computerized tax records may not exist because of the expense; and tax records may be considered secret (see many of the case studies reported in Bird and Slack, 2004a).

#### Uniformity in assessment

If property taxes are to be fair in their application, they must be based on assessments that are uniform within each taxing jurisdiction. Uniformity in assessment practices is especially important, for example, if the assessment base in a two-tier local government system is used to apportion the costs of upper tier services consumed by residents and businesses in the lower tier municipalities. Here, failure to assess all lower tier municipalities in a uniform manner will lead to inequities and distortions in local tax practices because the lower tier municipalities that are over assessed will very likely be taxed for public services used by those lower tier municipalities that are under assessed. Also, if a role of provincial/state/regional grants to municipalities is to redistribute income, then the assessed value of property within the municipality is likely to be the major, if not the sole, component of the grant base. If assessment practices are not uniform, the redistributive mechanism inherent in these grants will not work as intended.

Uniformity is most easily achieved when the assessment function is centralized at the regional/state/provincial level if not at the central or federal level. This is the practice in a number of countries reported in Table 1.3. At the very minimum, this means that all assessors must use a standard assessment manual where all details of the assessment practice and procedures are spelled out. As well, assessors should be required to attend training courses and pass clearly defined educational standards before becoming property assessors. This is the current practice in Canada as it is in other countries that have fully developed property assessment systems.

Uniformity in assessment means that all properties must be assessed in the same way; that is, residential, commercial, industrial, farm, government, properties of charitable organizations and not-for-profit agencies, and so on. In most countries, the practice of exempting certain properties or applying differential assessment rates to others lowers the tax base and creates potential problems. Lower assessment rates are often used to provide special treatment for farmland. This ranges from assessing farmland at its value as a farm rather than its value as land for other purposes (Canada, Japan and Mexico), to taxing farmland at lower rates (Colombia, India and Thailand), to exempting farm land from taxation (United Kingdom, Nicaragua, Guinea, South Africa, Tanzania and Tunisia), and a variety of other measures (Bird and Slack, 2004a).

Table 1.3 Assessment and appeals

	Responsibility for assessment	Frequency of reassessment	Appeals mechanism
OECD	State novernment for state and local taxes	Different in each state: ranges from annual to	State commissioner: courts
		7 years	
Canada	Generally provincial	Different in different provinces	Provincial review board; provincial courts
Germany	Local government	By law, every 6 years (actually use price	Changes in standard assessment are
Japan	Local governments based on a uniform	Every 3 years; annuxxally for business assets	Valuation Council and Review
-	national formula		Committees
United Kingdom	Central government	No revaluations on residential; 5 years for non-residential	Valuation tribunals; High Court
Central and eastern		4	
Europe		Ŝ	
Hungary	Local governments	At local clistretion; infrequent	n.a.
Latvia	Central government	Every 5 years	Head of local govt. council
Poland	Local governments (using information in	Annual	Local council; regional appeal board,
	central registry)	n.a.	Administrative Appeals Court
Russia	Central government	n.a.	No appeal mechanism
Ukraine	Central government – state tax admin.	5	n.a.
Latin America		C.	
Argentina	Provincial and local governments	Periodic adjustments	Formal appeal procedures at both govt. levels
Chile	National tax administration with local input	Between 3 and 5 years but often postponed	Internal Tax Service; Special Appeals Court on Property Valuation: Supreme Court
Colombia	Local governments	Every 5 years	Cadastral Division; petition tax
Mexico Nicaragua	State and local governments jointly National tax administration	Annual Infrequent	Fiscal authority; judicial branch n.a.

	Committee	Appellate Authority; appeal against revision	Objections to Directorate of Property Tax	Local and Central Boards of Appeal n.a.		n.a.	Objections handled by local councils	Valuation board and valuation appeal board	Appeals Tribunal	Appeals on tax rate categories	
	Once a year for urban real estate tax	Periodic revision of assessments	Every 3 years (annual in cases of rapid development)	Every 3 years Every 4 years		D.a.	Every 10 years, but generally longer	Every 4 or 5 years, but not always done	Every 5 years (or longer if approved by Minister)	Every 10 years with annual updates	50
	Local tax office directly under the state counci	ILocal authorities; some state assessment authorities	Central tax department	Provincial and Local governments  Local governments	7	Central government	Local governments	Local governments	Local authorities (funded by central government)	Urban municipalities within nationally set	ranges
Asia	China	India	Indonesia	Philippines Thailand	Africa	Guinea	Kenya	South Africa	Tanzania	Tunisia	

Source: Bird and Slack (2004a)

In some countries, special treatment is also accorded to managed forest lands (Canada and Poland, are two examples). This treatment takes a number of forms. In some Canadian provinces, for example, forest lands are exempt from property taxation; in others, they are taxed at a fixed amount per hectare; in still others their assessment is fixed in value (Kitchen, 2002).

There is also variation in the way in which mines and mineral resources are treated for property tax purposes. As with forest lands, they are sometimes exempt from property taxation, either because they are not assessed or because the property tax does not apply. Other times, mines along with underground improvements and minerals are assessed and subject to property taxation (Kitchen, 2002).

In some countries, special assessment rules apply to electrical, telecommunications and natural gas distribution systems; railway property other than land and buildings; and pipelines. Depending on the country and the utility, valuation may be based on assessed property value, gross revenue or gross receipts for natural gas, electricity distribution, cable television and other telecommunications; pipe length and/or diameter for pipelines; and length of tracks or tonnage per kilometre for railways. 'Rights of ways' owned by utilities and railways are sometimes taxed at a fixed rate per acre/hectare.

Most countries provide additional exemptions from property taxation. Some of these are mandated by senior levels of government and others are discretionary. Those that are most likely to be mandated include exemptions for properties owned and occupied by governments, universities, colleges, public hospitals, penal institutions, churches and cemeteries, and properties owned by charitable institutions. Public parks, roads, schools, public libraries, foreign embassies and property owned by international organizations also tend to be exempt from property taxes.

Exemptions create a number of problems or potential problems. First, they reduce the tax base and thus increase taxes on taxable properties or lead to a lower level and quality of local public services than would otherwise be the case. Second, for properties owned by senior levels of government, universities, colleges, public hospitals and penal institutions, payments-in-lieu of property taxes are often provided, although these payments are often less than the property taxes would be if they were permitted (Kitchen, 2002). Third, the policy of exempting properties or assessing them at a value that is less than other properties is discriminatory and unfair, leading to a mix of land use that may be different from the mix that would exist under equal treatment of all properties. If it is possible to make a sound case for the preferential treatment of certain organizations, then these organizations should be rewarded directly through a system of grants or through the application of differential tax rates (discussed below) applied to a uniform assessment base. In either case, such subsidization would be more transparent and subject to review and amendment by elected representatives according to their interpretation of the public interest (Kitchen, 1992).

Fourth, where owners/managers of taxed properties face higher costs than owners/managers of exempt properties, this differential will have implications

for competition among businesses, and between businesses and government (Kitchen and Vaillaincourt, 1990). Fifth, differential tax treatment of properties almost always has a distortionary impact on location and other economic decisions made by firms and governments.

Because of problems such as these, virtually all suggestions for property tax reform have recommended that exempt properties be subject to full assessment so that the value of the exemption is known. For properties where payments in lieu of taxes are appropriate, the payment should be equivalent to the taxes that would be collected under a uniform and equitable property tax system. For exempt properties where payments in lieu are not appropriate, serious consideration should be given to terminating their exempt status unless it can be established that there is a worthy public policy interest in retaining the exemption.

To ensure that the assessment system operates effectively and fairly there are at least two things that must be avoided: capping or freezing assessment and utilizing preferential assessments. Capping or freezing it almost always a response to rapid increases in assessed property values. In fact, this was a major reason why two provincial governments in Canada (Nova Scotia and Prince Edward Island) imposed a freeze on property assessment. While this practice seems to be politically palatable in the short run, it is simply bad policy and bad practice. It leads to inequities and distortions during the period of the cap or freeze and it is inclined to have suicidal political consequences when the cap or freeze is removed. During the freeze, inequities exist because individuals whose property values increase relatively bette pay proportionately more in property taxes than individuals whose property values increase by a larger proportion. This translates into the poor (as defined by property values) paying proportionately more and the rich paying proportionately less for local services.

Distortions may also arise because there is an incentive for individuals whose property values have increased the most to put pressure on local councils to increase expenditure, knowing that they will pay proportionately less to fund these additional services when compared with those individuals whose property values have increased very little.

After a cap or freeze is removed or properties are reassessed after a number of years, significant increases in some property values will be required to put all properties on a level playing field. This, in turn, will lead to more criticism, more complaints, the possibility, or even probability, of the province introducing more bad policies and practices to, once again, calm the critics.

Finally, if property values are increasing quickly, property owners are better off. If they are better off, why should they not pay taxes to reflect this? If the concern is that these taxpayers are income poor even though they are asset rich, there are property tax relief schemes that are available to assist taxpayers. One that is becoming more and more important in some countries is a 'reverse mortgage' – the homeowner continues to live in the house and when the house eventually sells, back taxes plus interest on these taxes are paid. A more common option for rapidly fluctuating property values is to introduce a three-year moving average to smooth out rapid changes in assessment and property taxes. This is

not without problems, however, because properties with escalating prices do not pay their fair share of taxes during the increase and they are over-taxed when properties are decreasing in value.

Since uniformity in assessment is a critical component of any properly functioning assessment system, special treatment should not be granted to certain property types; in particular, waterfront and vacation properties should not be given special consideration as some ratepayer groups in Canada, for example, have been advocating. These properties should (must) be assessed in the same manner and on the same base as other residential properties in every municipality. To do otherwise would be to grant them favourable treatment vis-à-vis other properties, and unfairly lower their share of property taxes paid to fund local services. Generally, the response of special interest groups is that they do not receive as many services as the rest of the community. If this is true, the local council can and should use variable tax rates to capture service differentials.

#### Responsibility for assessment

Reliance on a centralized uniform assessment manual is critical, but the way in which the assessment is carried out may also be important. In Canada, for example, assessors work for a variety of employers. In some provinces, they work for the province; in others, they work for an independent province-wide assessment authority; in another province, they work for a province-wide non-profit corporation; and in a couple of provinces, municipalities hire their own assessors. Differences in the effectiveness of using local rather than provincial or region wide assessors has been studied in at least one US study where it was concluded that county or regional rather than local assessors produced more uniform residential assessments.

In addition, a centralized agency (region-wide) responsible for assessment has a further advantage. It is able to benefit from economies of scale that might not be available to each municipality if each were to carry out its own assessment (Sjoquist and Walker, 1999). Alternatively, economies of scale might also be achieved by contracting out the assessment function (Bell, 1999).

Table 1.3 shows the level of government responsible for assessment in 25 countries. In about half of these countries, the assessment function is essentially local, and in the other half, it is regional or central. Even where assessment is listed as a local responsibility, most of these countries do as they do in Canada – they work from a standardized assessment manual that is uniform across a province/state/region or country.

In the majority of countries, responsibility for assessment rests with at least one level of government. In a few countries, generally those that are relatively poor with little tax administrative capacity, self assessment may be the practice. Here, property owners assess their own property and pay a tax based on this assessed value. Hungary, Tunisia and Thailand are examples of countries that have self assessment systems (for a discussion of self assessment systems, see

Bird and Slack, 2004a). A major problem with this approach is that unless there are significant and effective penalties for non-reporting and under-reporting, it is almost certain to lead to under estimates of property values with the more expensive properties carrying a higher rate of underestimation than lower price properties. Not only is this unfair, it erodes the size of the tax base leading to higher tax rates and/or lower levels of service than would otherwise be the case (Bird and Slack, 2004a).

#### Frequency of assessment

If the assessment base is to be fair and productive, periodic valuations and revaluations must be undertaken to ensure that assessment is kept up to date. In value based systems, a shorter time frame for reassessment is preferred because this helps in maintaining the legitimacy of the tax base and it reduces the risk of sudden and dramatic changes in tax burdens that often arise when reassessments are conducted sporadically and infrequently (Bird and Slack, 2004a).

Indexing the assessment base (between infrequent reassessments) to keep up with inflation, as is done in some countries, is not as equitable as conducting frequent property reassessments. Indexing all properties by the same factor (consumer price index or some other index) fails to capture the differential rates at which individual properties change in value. On the other hand, giving up some fairness may be a small price to pay if there are insufficient resources to conduct reassessments on a fairly regular basis. Furthermore, indexing that captures relative price changes by location and type of property could minimize some of the large assessment changes that might otherwise occur at the time when properties are actually reassessed.

Table 1.3 shows the range in the frequency of reassessing properties. Although there are exceptions, the legislated interval for reassessing properties is generally reported to be from 3 to 10 years. In practice, however, the interval is frequently longer. In Canada over the past decade, most provinces have moved to more frequent and up-to-date reassessments – some provinces now do them annually, most others every three or four years but many are moving towards annual reassessment.

#### Appeals mechanism

An important component of a well-run assessment system is an effective appeals mechanism. In other words, taxpayers should have an avenue for appealing their assessment if they feel it has been incorrectly determined. In most cases, this starts with a reassessment by the assessment authority to correct factual errors and resolve minor differences of opinion over the value of the property. If differences cannot be resolved, the taxpayer should be able to proceed to a higher authority, generally made up of valuation experts. In some countries, there may

be a further stage whereby the appeal could go to a specialized tax court. Table 1.3 records the assessment appeals bodies in 25 countries.

#### Assessment technique

When reassessment based on market values is done frequently (yearly, every second year, or even every third year), it is not possible for property assessors to reassess each piece of residential property on such a frequent basis. This would require too many assessors and it would be too expensive. This shortfall, however, can be overcome with mass appraisal techniques for residential properties. Indeed, this approach is becoming more and more common in countries relying on frequent property reassessments.

Mass appraisal makes use of a multiple regression statistical package. It predicts the market value of properties from known values of other variables associated with these properties (such as living area, lot size, location, availability of garage, age of building, number of bathrooms, and so on). This technique examines properties that have actually sold and identifies the statistical relationship between a number of features of these properties and their selling price. This statistical relationship is used to estimate the price for properties that have not sold recently.

This approach does not eliminate the need for traditional property assessors and assessment practices. Indeed, property assessors are necessary for examining a certain number or properties yearly and for assisting in developing and improving the computer-assisted mass appraisal (CAMA) models that identify property features affecting price. Property assessors are also needed for assessing properties that display anomalies from the regular pattern and for handling property assessment appeals. What mass appraisal does do is to permit more frequent assessment updates without a physical inspection of all properties.

In many countries, accessment agencies now use software packages for mass appraisals. Where this technique is used, local assessors can quickly analyse thousands of sales and use this information to estimate market values for properties that have not recently sold. It has definitely improved the quality and frequency of reassessment and permitted municipalities to have much more up-to-date assessment rolls.

#### **Summary**

A uniform assessment system is necessary if one is to establish a tax base that is fair, transparent and accountable. Uniformity is more likely achieved if a few practices are followed. First, within a region, state, or province, all assessors work from a standard assessment manual that is updated frequently to reflect changing market conditions. Second, assessors should be required to pass specific education and training programmes on assessment practices and procedures. Third,

although the evidence is sketchy, assessors working for centralized assessment agencies seem to be more successful (because they are more likely to work at arm's length) than those working for municipalities in achieving uniformity in assessment. Fourth, the more frequent the reassessment, the fairer the assessment system, leading to fewer surprises for taxpayers, fewer complaints and fewer appeals. Fifth, there should be an effective appeals mechanism in place to correct for perceived inequities in the assessment system. Finally, wherever possible, mass appraisal techniques should be used to improve the quality of the assessment system and to minimize the cost of the assessment process.

#### Issues with property tax rates

Assessment is the first major component of the property tax system and setting the local tax rate is the second major component. In countries where local governments set their own property tax rate, the first step is for the local government to determine its expenditure requirements or needs. The second step is for the local government to subtract all non-property tax revenues (grants, user fees, charges, permits and so on) from spending requirements, leaving the amount that is to be funded from the property tax. The third step is to divide the required property tax revenues by the property tax base to get the property tax rate. This rate, while easy to calculate, is not free of controversy, especially as it is applied in most countries. The following discussion covers a number of issues around tax rates.

#### Setting the property tax rate

In some countries, tax rates are set locally, although limits are sometimes imposed by senior levels of government; in others they are set by senior levels of government. In Japan, Latvia, Ukraine, Chile, Nicaragua, China, Thailand, Guinea and Tunisia, rates are basically set by a senior level of government. In Hungary, Poland, Russia, Colombia and the Philippines, rates are set by local governments but within limits imposed by a senior level of government (Bird and Slack, 2004a).

On the established theme that the most transparent, efficient and accountable local government is one that is responsible for raising its own revenue, it follows that local governments should be responsible for setting their own tax rates. Failure to permit and require this means that the close link between decisions over revenue generation and expenditure decisions is lost. In those countries where the tax base is determined by an independent assessment authority or where it is the responsibility of a senior level of government, responsibility for local rate setting is particularly important.

Where a two-tier system of local government exists and where both tiers rely on the property tax, the upper tier should set its tax rate independently of the tax rate set by the lower tier. For each level of government, the tax rate should be high enough to generate sufficient revenues (beyond those generated by user fees, grants from senior levels of government, and other local revenues including permits, licences, and so on) to cover the cost of local public services that each level provides. Each tier should also use variable tax rates (described below) if service levels and standards vary across the municipality or jurisdictional area.

#### Limits on property tax rates

The practice of imposing tax limits on municipal governments by a senior level of government is more prominent in some countries than in others. In the USA, for example, a number of state governments have imposed limits on tax rates for local government (O'Sullivan, 2001; Brunori, 2007). In Canada provincial governments have not placed limits on the general municipal tax rate although some provinces have legislated the amount by which commercial/industrial tax rates must differ from the residential rate.

Limits on tax rates are intended to control and restrict the growth in municipal government spending and hence, property taxation. Recent research on the success of these limits has addressed three main questions. First, have property tax limits reduced property tax revenues? Based on the evidence, the answer is yes. Property tax revenues have declined in constant dollars if not in current dollars. In California, proposition 13 led to an immediate decrease of about 45 per cent. In Massachusetts, the initial impact was a decrease of 18 per cent (Clemens *et al.*, 2003). Overall in the USA, it has been estimated that local property taxes per capita fell by 3 per cent after tax limits were imposed (Shadbegian, 1999).

Second, have reductions in property tax revenues been offset by increases in other local revenues? The evidence here is not as compelling but it does indicate that other local revenue sources have generally been substituted for property tax decreases (O'Sullivan, 2001; Brunori, 2007). Greater reliance is now placed on local user fees, permits, licences, and so on.

Third, have property tax limits affected input choices (administrative staff versus service providers such as police officers and firefighters) and quantities of output produced by local governments? The evidence here is mixed. Some studies found that local governments responded to tax limits by cutting proportionately more of their administrative costs while others found that local governments responded by cutting proportionately more of their service costs. Similar variations in results were noted for output. Some studies found that municipalities produced roughly the same quantity of services with less revenue while other studies noted that private sector provision had replaced public provision of local services (O'Sullivan, 2001).

Property tax limits also have another major impact. They curtail the decision-making power of municipal governments because they reduce the municipal

sector's flexibility and capacity to raise its own revenue. This is particularly worrisome if it means that local governments cannot provide sufficient revenues to provide local public services that are desired or wanted by local citizens.

Analytical arguments supporting property tax limits for local governments are generally weak unless, of course, they are necessary to prevent property tax exporting (discussed below). This arises when local governments levy higher taxes on industries, believing that the ultimate tax burden will be borne by non-residents (Boadway and Kitchen, 1999).

In general, however, locally elected councils should be responsible for setting local property tax rates. They are in the best position to determine what citizens want and need. Furthermore, if these councils are unresponsive to local wishes, they are likely to be voted out of office at the next municipal election. Also, the comparatively large number of municipalities in every country means that local tax rates are set in a competitive environment; that is, every municipality is aware of its neighbouring jurisdiction's tax rates and unwilling to have its rate differ noticeably from its neighbours for fear of losing businesses and people. The literature tells us that property tax differentials play a role in intra-regional location decisions - hence the reason why municipal governments compete with their neighbours to control property taxes. This tax competition works to control tax rates and it permits the municipality to make its own spending and taxation decisions without the restrictive controls of a senior level of government. Finally, the implementation and use of municipal performance measures would be much more effective and efficient in controlling the spending behaviour of local governments than are tax limitations.

#### Variable tax rates versus uniform rates

The issue here is whether a local taxing jurisdiction should apply a single uniform property tax rate to all properties within its taxing jurisdiction or whether different (variable) tax rates should be used, that is tax rates that vary with the cost of servicing different properties by type or by location within a municipality or rates that may vary for other reasons. The evidence suggests that a number of countries have one tax rate for all properties. Others have tax rates that differ by property class, or that differ by assessment practices, or that differ because of tax relief for specific classes of property (Bird and Slack, 2004a). In most cases where variable rates are used, properties are assessed at a uniform percentage of market value (100 per cent, or 80 per cent, or some other fixed percentage) and differential rates are applied to the assessed values. In a few countries – the Philippines, for example – differentiation is achieved by applying a uniform tax rate to properties that are assessed at different percentages of value (Guevara, 2004).

Many countries have introduced, perhaps unwittingly, differentiation through the use of graduated tax rates. This has been achieved by exempting low-value properties from taxation, or as in some provinces in Argentina, by using tax rates that increase with the value of the property (Rezk, 2004). Rural parts of some countries have attempted to apply progressive land taxes to the property holdings of individuals. This has generally failed because of administrative difficulties in assembling the information, especially when the landowner owns property in different jurisdictions. Achieving differentiation in any way other than through differential tax rates leads to a property tax system that is less visible, and therefore less accountable and transparent, and considerably more difficult to understand than one that assesses all properties in a uniform manner and applies differential tax rates.

Traditionally and historically in Canada, as in most other countries with a history of property taxation based on property values, the practice has been to apply a single tax rate to all residential properties and a higher tax rate to commercial and industrial properties. More recently in Canada, but not everywhere, this practice has changed. All municipalities in the provinces of Alberta, British Columbia and Ontario are now permitted to use variable property tax rates. Some other countries have also moved in this direction.

Variable tax rates should be designed to capture cost differences across properties, property types and municipalities or neighbourhoods within a city (municipality) or city-region. For example, if some properties or property types are more expensive to service, a case can be made for using differential property tax rates. Here, higher tax rates are assigned to properties that are more expensive to service.

Variable tax rates have a number of advantages (Slack, 2002a; Kitchen 2002). First, they are fair on the basis of benefits received as long as the rates are set to capture the cost of municipal services used up by different property types or property location. Second, they are efficient if designed to recover the cost of local public services consumed - no incentive would exist for a household or firm to alter its behaviour or location to avoid the tax as long as it matched the cost of services used up. Third, they are efficient as long as higher tax rates apply to tax bases that are most inelastic in supply. Since residential property has an inelastic tax base when compared with commercial and industrial property (it can move to other municipalities and to other countries), this calls for higher tax rates on residential properties than on commercial and industrial properties, a practice that is almost never followed as is noted in the next section. Fourth, 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.

#### Taxation of business properties

The taxation of business properties (commercial and industrial) at higher tax rates than residential properties is a common practice across countries (Bird and

Slack, 2004a). Not only does it consist of higher property tax rates on these properties, it often consists of a number of other property related charges that have no relationship to services received or to property value.

Higher property taxation of commercial and industrial properties is generally done in one of two ways: either through the practice of assessing business properties at higher values than residential properties with the same tax rate applied to both property types; or through the simple application of higher tax rates on business properties. Higher taxation of business properties creates a number of efficiency and equity concerns. Efficiency in municipal service levels will not be achieved if revenues collected from property taxes on business 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 three Canadian studies that compared the property (ax paid by non-residential properties with the cost of municipal services consumed by these properties. All studies (Kitchen and Slack, 1993; KPMG, 4995; MMK Consulting Inc., 2004) 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.). The studies concluded that, when combined with higher effective property tax rates paid by the non-residential sector, the commercial/industrial sector is over-taxed and the residential sector undertaxed. Beginning in 1995, the city council in Vancouver (Canada) did something to correct this. It 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 beyond the range of fairness (Kitchen, 2002) - 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.

At least one study in the USA found similar results. Specifically, it was estimated that the 'business related' share of combined state and local expenditures in the USA is about 13 per cent, although there is considerable variation from state to state (Oakland and Testa, 1995). These businesses, however, pay proportionately more of the state and local taxes.

Further concerns with the over-taxation of the commercial/industrial sector arise because this tax represents a fixed charge that must be paid. The tax is fixed in the sense that it is unrelated to the value of municipal services used or profits earned. As long as the tax rate is more than necessary to cover the marginal cost 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 can lead to less economic activity, lower output, fewer jobs and a less competitive business environment (Ottawa, 1998).

There is also an issue of whether this over-taxation plays a role in location decisions. Since firms and businesses generally locate where they can maximize their 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 USA, suggests that property tax differentials are relatively unimportant in intermunicipal or inter-regional location decisions but do play an important role in intra-municipal or intra-regional location decisions (Kitchen and Slack, 1993). Higher effective property tax rates on commercial and industrial properties in one municipality within a region or area when compared with neighbouring municipalities create incentives 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 total;) concentration of firms and businesses in the lower taxed jurisdictions. In other words, intra-municipal tax competition could be potentially destructive if it led to a race to have the lowest tax rates. A study on municipalities in the province of British Columbia (Canada) examined this issue and concluded that while there is some evidence that municipalities react to tax increaces of their neighbours, there is no widespread destructive competition for capital (Brett and Pinkse, 2000). Similar studies in the USA, however, have concluded that property tax competition among neighbouring municipalities is much more prevalent and widespread (Brueckner and Saavedra, 2001

In reality, the extent to which firms and businesses respond to property 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 US study of individual office buildings in downtown Chicago, it was found that 45 per cent of property tax differentials was shifted forward onto tenants as higher gross rents per square foot and 55 per cent was borne by owners (McDonald, 1993). The reality that some firms are willing to pay a premium to locate in the downtown core suggests that those firms benefit from 'economic rents' created by that location. For example, large financial institutions 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 of the economic rent. In other words,

it is difficult to know at what rent (or property tax) a firm will choose to move out of the downtown location.

There are at least two more positive effects that would arise from shifting the relative tax burden away from the business sector (Damus *et al.*, 1987; Devarajan *et al.*, 1980). First, a reduction in the relative property tax burden on this sector reduces the potential for exporting the property tax to non-residents (see discussion in the next section). Second, since there is some evidence suggesting that capital invested in real property is, on average, taxed at higher rates than capital invested in other factors of production, at least in Canada, the variation in capital tax rates is reduced if this burden is altered. On balance, the reduction in tax exporting and the decrease in the variance in tax rates could result in an improved allocation of resources for the Canadian economy as a whole and overall efficiency gains (Economic Council of Canada, 1987).

A major defence of the over-taxation of business properties is provided by municipal officials and some taxpayers and it is as follows. Since businesses can deduct all expenses incurred in earning income (including business taxes) for their corporate income tax base, and since owner-occupiers of residential dwellings are not allowed similar deductions, it has been suggested that an extra tax on business is legitimate in that it attempts to even out the disparities in taxes that would otherwise exist on these two different categories of taxable property. While it is true that owner-occupiers are not able to deduct property taxes, it is also the case that owner-occupiers are not required to include in taxable income either imputed income from their owner-occupied dwellings or, in most countries, capital gains earned on the disposal of their principal residences (Boadway and Kitchen, 1999) Such exclusion is similar to a deduction from income for tax purposes (as in the case of the tax on businesses) in that both reduce the taxable economic income of the taxpaying unit. On this basis, it is difficult to make a case for a higher tax rate on commercial and industrial properties.

Concern over the kinds of distortions noted above with the property tax on commercial and industrial properties has prompted at least one suggestion for reform in Canada (Bird and Mintz, 2000; Bird and Slack, 2004b; Bird and Wilson, 2003). Specifically, it has been argued that revenues from a portion of the non-residential property tax should be replaced with revenues from a new business value tax (BVT). This BVT would be a value-added tax. It would be levied on business income. It would be on production and not consumption. This would make it an origin-based, not a destination-based tax; hence, it would tax exports and not imports. Further, it is suggested that it be a provincial tax, with municipalities having the opportunity to set local rates that are 'piggy-backed' onto the provincial rate. The province could even impose limits on local surcharges to prevent excessive locational distortions. Because the BVT is a value-added tax (essentially sales less cost of goods purchased), it would eliminate a number of the distortions created by the current over-taxation of business property. This type of local business tax is used in Germany and Japan.

#### Exporting commercial and industrial property taxes

The opportunity for the commercial/industrial sector to export its property tax burden onto residents of other municipalities has the potential for misallocating resources and lowering municipal accountability. Of course, the ability of a firm to export will depend on the elasticity of demand for the exported product.

Tax exporting refers to situations in which some portion of the local tax burden is borne by people who live elsewhere, either through a change 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 communities. If the commercial/industrial property tax in every jurisdiction is exported to some extent, those jurisdictions exporting relatively more of the 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 runs counter to equalization schemes of senior levels of government that are aimed at redistributing resources (income) from relatively high income jurisdictions to relatively low income jurisdictions.

There is limited evidence on tax exportation. One Canadian study on a sample of large municipalities in Ontario is somewhat dated (Thirsk, 1982) but it is all that we have. It concluded that the degree of exportation ranged from a low of 16 per cent of the commercial industrial tax burden to a high of 106 per cent. More than this, relatively rich municipalities had relatively high exporting rates whereas relatively poor municipalities had relatively low tax exporting rates. This tax exporting resulted in 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 municipal government responsible for local services and the ultimate person/agency/body paying the tax is missing.

#### Property taxes and urban sprawl

Since the tax is levied on property, any investment that increases the value of the property (such as any improvements including an increase in density) will subject it to a higher tax. For this reason, higher property taxes are expected to discourage density. If, on the other hand, higher property taxes reflect higher levels of service, it is unlikely that there would be any impact on location or land use. To the extent that the allocation of service costs is based on property values and not on services consumed, some taxpayers pay more or less for services than the benefits they receive.

An extensive literature in Canada and the USA suggests that spatial factors do affect the costs of development (Marchand and Charland, 1992; Transit Cooperative Research Program, 1998; Brueckner, 2001). In particular, the density of development and its location with respect to existing services influence the costs of providing services. For example, 'hard' services such as sidewalks, roads and water and sewer mains cost less to provide in denser neighbourhoods. With water, a pipe is laid down the centre of a street and individual service lines extend from the water main to each building. In high-density neighbourhoods, there are more dwelling units per kilometre of water main over which to spread the costs. Furthermore, increasing the distance from central infrastructure facilities such as water and sewage treatment plants will increase costs.

An efficient property tax would thus reflect the higher costs associated with providing services in less dense developments. This would generally mean that property taxes based on services received should be higher in suburban municipalities than in the core. If property taxes are higher in the core and service provision less costly, the property tax creates an incentive to move to less dense developments (Slack, 2002b).

#### Responsibility for property tax billing and collection

Before property taxes may be collected, each taxing jurisdiction is generally responsible for making sure that the tax role is prepared, tax liability is established for each property (the tax bill) and ensuring that the tax bills are distributed to all property owners. In some countries, these functions are all handled by the jurisdiction that sets the tax rate. In other countries, municipalities set their own tax rates with the remainder of the activities handled by another level of government (regional or state) or a private sector institution (banks, for example). To illustrate, the tax role is often prepared by a region-, state- or province-wide agency (discussed above); tax billing and collection are often done by the taxing jurisdiction but there is no reason why this need be the case. Tax billing and collection benefit from economies of scale; hence, these two functions could be handled by a private sector institution or by a larger unit of government. In the province of Ontario in Canada, for example, all regional and county governments (upper tier) set their own taxes independently of the tax rates set by the local municipalities (lower tier). The local municipalities then 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 face of proposals to migrate billing and collection to the upper tier in order to take advantage of economies of scale. Furthermore, 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 need to rest with the taxing jurisdiction that sets the tax rate.

Tax collection is usually, but not always, a local government function. If the property tax is not paid by a specific due date, interest charges and a late-payment penalty are generally charged. If payment is not forthcoming after a considerable period of time, the property may be seized and sold to pay all delinquent taxes and penalties. Such sales are rare, however. A more effective enforcement mechanism, especially in countries with well defined legal systems for property ownership and transfers, involves preventing the transfer of legal title to the property (either through a sale or gift) until all past property taxes and penalties have been paid.

Tax arrears can be a serious problem for some countries because they lower the revenues generated by the property tax. The larger the uncollected taxes, the lower the effectiveness of the property tax system in generating revenues to fund local public services. Large tax arrears create higher taxes on those properties that pay their taxes and/or lead to fewer local public services than should otherwise be the case.

# Other land and property related taxes used by local governments

In addition to the property tax, there are a number of additional land based taxes that are employed in virtually every country. The range of charges is extensive. It includes development charges, special assessments and value capture levies on the property tax base for financing local infrastructure. It also includes land transfer taxes, capital gains taxes, stamp duties, inheritance taxes, value-added taxes, and so on. Except for the first three listed above that have fiscal merit, there is no solid economic rationale for the rest.

One that is fiscally appropriate is often called a development charge, or lot levy, or exaction. It is used to recover the off-site costs of capital infrastructure required to service new development or growth. Where these are used, they almost always include the growth-related cost of infrastructure for water supply, sewage treatment, trunk mains and roads. Depending on the country and municipality, they may also include growth-related infrastructure costs for general administration, police, fire, recreation and cultural facilities (Kitchen, 2002).

A development charge or lot levy corresponds best to the benefits-received principle when the costs and benefits of the infrastructure for each property can be determined. An efficient development charge must cover the full cost of delivering the service: a capacity component which covers the capital cost of constructing the facility, plus a location or distance/density charge that reflects the capital cost of extending the service to properties or neighbourhoods.

The most efficient development charges are those that vary by type of property (residential, commercial or industrial), neighbourhood and distance from source of supply, so that each charge captures the extra cost of the infrastructure required to service the new growth. Most Canadian municipalities, however, do not use variable charges. Instead, they impose identical charges on all properties

of a particular type, regardless of location. While administratively convenient, this practice levies the same charge on residential dwellings in low-density neighbourhoods as on it does on residential dwellings in high-density neighbourhoods. This occurs even though the marginal cost per property of infrastructure projects in low-density areas is higher, which can lead to urban sprawl (Slack, 2002a). Likewise, similar charges to properties that absorb different amounts of resources, because of factors such as terrain or soil type, will encourage development in the wrong places. While it may be naive to expect municipal officials to calculate the infrastructure cost for each new property, costs could and should be calculated for each new development area or neighbourhood, to discourage inefficient patterns of development (Kitchen, 2006).

The second type of charge that has fiscal merit is some form of special assessment or land betterment tax that has the capacity to collect taxes from property owners who are beneficiaries of specific local public services. In the USA and Canada, these charges are common; elsewhere, they are far less common. A special assessment is a specific charge added to the existing property tax to pay for improved capital facilities that border on them. The charge is based on a specific capital expenditure in a particular year, but may be spread over a number of years (Tassonyi, 1997). Projects financed in this way include construction or reconstruction of sidewalks, streets, water mains or storm sewers. The justification is that an owner of an abutting property will benefit from the local improvement and should, therefore, help fund it.

Municipalities use several types of special assessments, and the correctness of the apportionment depends upon the base for assessment. The most common base, foot frontage of each benefiting property, is appropriate for projects whose cost per property increases with the width of the lot. For projects such as parks, whose benefits accrue to particular areas or blocks within a community, the best approach may be zone assessment, under which all properties in the serviced area pay the same share. Other possible bases for special assessments, such as lot size, or charging each property based on their increase in value, are less satisfactory than foot frontage and zone assessments. A sensible approach is to split the cost of improvements that benefit an abutting property and the public at large by charging the bordering properties, for example, 40–60 per cent of the total construction costs, with the municipality raising the balance. The challenge is to match the share assigned to abutting properties with the marginal benefit to those properties.

The third type of charge is a value capture levy. It can be designed to recover the increase in land value arising from a public investment. Municipal spending on public infrastructure and subsequent zoning decisions can increase the commercial value of holdings of private landowners. Value capture levies are justified if the public investment creates windfall gains for the private developer. The levy permits the municipality to capture (some of) the economic rents accruing to the private sector that have been created by this local infrastructure spending.

The value may be captured in a variety of ways including a requirement that the developer provide various facilities and infrastructure or cash, in return for being permitted to undertake the development that the new municipal infrastructure facilitates and makes profitable. Value may also be captured through a tax on commercial revenues generated by property abutting the infrastructure. Alternatively and more likely, a special annual tax on property could be levied on value added (Tassonyi, 1997). This would be relatively easy to implement and administer, although care would be required in estimating the value added to the property as a result of the public infrastructure (Kitchen, 2008). Value capture levies are most suitable for mega-projects such as rapid transit expansion. Also, large developers could negotiate to provide transit construction improvements.

The other charges noted earlier in this section that municipalities sometimes use are much more difficult to justify on any kind of benefits based principles. Land transfer taxes, for example, may be relatively easy to administer, but they are a very bad local tax. A land transfer tax is levied at the time of sale of a property and usually is calculated as a percentage of the value of the property transferred. The tax, which must be paid before the transfer is registered, is like a sales tax payable by the purchaser and is calculated as a percentage of the purchase price. A number of variations on land transfer taxes exist. For example, the tax rate sometimes increases with the value of the property; in some cases, taxes are higher on non-residents.

Since this tax bears no relationship to the benefits received for local services, it imposes a burden on those who buy property, while placing no burden on those who remain in their existing property. Not only is this tax unfair in its distributional impact, it reduces house sales and house prices and impedes household mobility (Dachis *et al.*, 2008). The tax also provides an incentive for those who remain in their houses to demand municipal services knowing that they will be disproportionately paid for by those who buy property.

Like the land tax, most of the remaining charges bear no relationship to the value of local public services consumed by the owners or occupiers of different properties. A major problem with overcharging properties for local public services is the distortions and inefficiencies that are created, many of which are described above. Also, these charges will, in all likelihood, lead to lower business investment, reduced economic activity, and fewer jobs than could otherwise be the case. This is not a desirable outcome, especially for developing and transitional economies who are trying to grow and improve their standard of living.

#### **Incidence of the property tax**

The legal incidence of the property tax is on the owners of real property. The emphasis in this chapter, however, is on economic incidence – the tax's final resting place. Every tax creates an incentive for those paying the tax to try and avoid it, either by attempting to shift its burden to another economic agent (for example, from the owner to the tenant in the case of rental properties or from the producer to the consumer or the factor of production in the case of the tax on

commercial and industrial properties) or by shifting resources into other, less heavily taxed activities, or by shifting one's activity to other, less heavily taxed jurisdictions. The following discussion focuses on who pays the property tax and a range of property tax relief measures that are used in a number of countries.

#### Who pays it?

Local council meetings, taxpayer discussions and newspaper reports on local government revenue issues frequently focus on the incidence of the property tax and more specifically, on its so-called regressivity – a tax is regressive if it absorbs a greater percentage of the income of lower income individuals or households than of higher income individuals or households. Indeed, most municipal officials, taxpayers and some analysts believe that the property tax is regressive, though a number of studies have disputed this. Determining the incidence of the property tax, or of any tax, is an empirical matter, and any empirical study of the property tax must begin with assumptions about the tax's distributional impact on taxpayers. These assumptions can be derived, however, only after one has decided on the role for the property tax (see Dahlby, 1985, for an excellent summary of the assumptions used in the tax incidence literature and how these assumptions affect the incidence pattern). Is it a benefits tax that falls on a property's consumption of municipal services: Or is it unrelated to benefits received and more likely to be a tax on capital? Each of these views is summarized here.

# If it is a benefits tax?

One view is that the property tax approximates a benefit tax and, as such, encourages the right sort of fiscal decisions by local governments and taxpayers. Benefit taxation, it is argued, promotes efficient public decisions because taxpayers will oppose any programmes or services whose costs exceed its benefits (Fischel, 2000; 2001). Benefits from local public programmes and their costs in terms of property tax liabilities tend to be capitalized into property values. That is to say, the benefits of low crime rates and good public parks or sound local infrastructure on the one hand, and of low property tax rates, on the other, will manifest themselves in higher market values.

To understand how property tax capitalization can work, consider the case of two neighbouring cities, X and Y. The two cities are identical in every respect (structure, demography and provision of local public services) except one: property taxes are higher in City Y. If taxpayers (residential and non-residential) are aware of this property tax differential and respond to it, it becomes capitalized into lower property values in the higher taxed city (City Y) vis-à-vis the lower taxed city (City X). The following numerical example illustrates how capitalization works. Consider two houses (A in one municipality and B in another municipality) that are identical in every respect except for their property tax

liability. Property taxes on house A exceed those on house B by \$2,000. Higher property taxes on A mean that the imputed net return (imputed gross return minus operating costs including property taxes) on this property is \$2,000 less than the imputed net return on B. If the rate of return on investments in general (as reflected in the interest rate) is currently 10 per cent, this translates into a \$20,000 difference in property values (\$2,000 divided by 0.10).

As long as differences in property taxes are capitalized into differences in property values, the tax provides no incentive to live or locate in one municipality over another and in that sense, is efficient. Recent evidence suggests that considerable capitalization of property taxes occurs in cities in the USA (Zodrow, 2001a; Fischel, 2001). In Canada, there have been two empirical studies of the capitalization of residential property tax differentials into residential property values. The first was completed in the 1970s and the second in the early 1980s and the results may no longer be relevant. For what it is worth, the first study, based on housing data for London, Ontario, found no evidence of capitalization (Chinloy, 1978). The second study, based on similar data for 27 communities within the city of Edmonton, Alberta, found some capitalization (Shah, 1989).

If the property tax were a true benefits tax designed to jund local government services, the tax price of a service would equal the marginal benefit from the service and there would be no incentive to move to one municipality to another in order to minimize the net tax burden (municipal expenditures minus municipal taxes). Given a number of jurisdictions large enough to ensure the satisfaction of every level of demand for public services and perfectly mobile consumers/ taxpayers who vote with their feet, net tax burdens would be the same across all municipalities. In this scenario, the property tax is like a user fee in that it covers the cost of municipal services consumed and involves no redistribution of income – local residents bear the full burden of any increase in property taxes, and since the tax falls on housing, it is regressive. The regressivity arises because the tax is a flat percentage rate on the values of dwelling units; since lower income households arend more on housing relative to income than higher income households spend, it follows that they spend relatively more on property taxes as well. The question that lingers, however, is whether this way of considering the tax burden is in fact a valid one.

#### If it is a capital tax?

An alternative conceptual view of the property tax (often called the 'new view') is that it is a tax on capital and, as such, a source of distortion in housing markets and in local fiscal decisions (Zodrow, 2001a; Zodrow, 2001b). The fact that the tax base includes structures and other improvements to land discourages improvements; the result is an underutilization of land in the sense that the amount of capital used per unit of land is less than the economically efficient amount. Also, since the tax is on capital, it is progressive; that is, it claims a higher percentage of income from higher income individuals than it claims from

lower income individuals. This arises because higher income households own a disproportionately large share of the stock of capital.

#### Which is the preferred view?

There is no clear cut answer to this question. Both views have their theoretical strengths and weaknesses and both have been tested empirically with varying results (Kitchen, 2002). Also, both have their supporters and both have their detractors. After considering the evidence on property tax incidence, it is impossible to say whether the property tax is regressive or not. In all likelihood, it is less regressive than it is said to be by the strongest proponents of the benefits tax view but not as progressive as it is said to be by many proponents of the capital tax view. In any case, a more fundamental question is whether on not one should really be concerned about the regressivity of the property tax? The answer is not likely because the property tax funds a bundle of municipal services that provide collective benefits to the local community. Hence, the tax should be structured so that it is allocatively (economically) efficient, accountable and transparent, as discussed earlier in this chapter. Concerns about the distributional impacts of the property tax are important, but they should be handled through property tax relief schemes or, more generally, through income transfer programmes that are targeted for the truly needy (Boadway and Kitchen, 1999).

#### Property tax relief programmes

Property tax relief programmes are intended to reduce the property tax burden on specific individuals in specific circumstances. Reliance on one or more of these programmes is motivated by a perception that the property tax is regressive (takes proportionately more income from low income individuals than from high income individuals) – an issue that has been the subject of many studies and debates for a number of years without any firm conclusion or direction (Kitchen, 2002; Kitchen, 1992; Duncombe and Yinger, 2001). In spite of the uncertainty over whether or not the property tax is regressive, municipal governments and their senior counterparts in countries where a property tax is used almost always assume that it is regressive. This has produced a variety of programmes including those described here. While this description concentrates on the Canadian schemes or potential schemes, it is also indicative of those used in other countries.

**Property tax credits** are used in five Canadian provinces (Quebec, Ontario, Manitoba, Alberta and British Columbia). The credit is designed so that its value varies inversely with personal income tax liability; that is, as income tax liability increases, the value of the credit, which is subtracted from personal income taxes payable, declines.

One comprehensive analysis of the Ontario refundable property tax credit programme suggested that the property tax credit is progressive in its impact on taxpayers; that is, it provides relatively greater benefits to low income households vis-à-vis high income households (Bird and Slack, 1978). A similar conclusion was noted some years later in a study completed for the Fair Tax Commission in Ontario (Ontario, 1993). While property tax credits are likely to be progressive, especially if they are refundable, they are not problem free. For example, when a tax credit exceeds tax liability, the tax is refundable if the government reimburses the taxpayer for this difference. It is non-refundable if the government does not refund this difference. A problem exists because residents pay their property taxes during the year, yet they do not receive the tax credit until their income tax return has been filed early in the following year. This practice can create liquidity problems for income-poor taxpayers because of the relatively long wait between payment of property taxes and receipt of the tax credit.

Furthermore, given the uncertainty over whether or not the property tax is regressive, the property tax credit could more appropriately be analysed as part of the general income-transfer programme in province, region or state, and not as a credit specifically designed to offset property tax liability. Indeed, it is unlikely that many taxpayers see any link between property taxes paid and the ensuing tax credit. After all, the credit for property taxes paid in one year is not available until the income tax return is filed in the following year.

When it is considered as a component of the state income-transfer system, one could question whether the property tax credit, which is designed to provide more relief to those with more wealth (higher property values), generates the desired income redistributional results. To some, it may seem strange to have an income distribution system that provides more relief for taxpayers with more wealth.

In summary, uncertainty over regressivity of the property tax and the tendency to provide relief that varies directly with property values argues strongly in favour of eliminating property tax credits and using other components of the state, region or provincial government's income-transfer system to improve inequities in the overall distribution of income. Indeed, the analysis of the province of Ontario's property tax credit programme referred to above concluded that it is 'difficult to argue convincingly that the property tax credit system ... has been either terribly successful or terribly needed' (Bird and Slack, 1978).

Tax deferral programmes are not widely used, although local governments in some countries have the power to implement them for specific taxpayers. Also, they are sometimes implemented by a more senior level of government. For example, in the province of British Columbia in Canada, a province-wide tax deferral programme for senior citizens and handicapped individuals operates. And in the province of Ontario, a deferral scheme is mandatory for low-income seniors and the disabled to alleviate any tax burden arising from increased taxes due to reassessment.

Under a tax deferral programme, the owner of the property is permitted to defer some or all of his/her property taxes on an annual basis. Depending on the programme, the lost revenue will be made up from revenue provided by a senior level of government or from general revenues of the municipality itself. The amount of the tax deferred becomes a lien against the property and is payable to the senior level of government or the municipality when the property is transferred. Also, there is usually, but not always, an interest charge applied to the deferred taxes.

There are a number of implications arising from the use of tax deferral schemes. First, if one's ability to pay taxes is measured by a combination of income and wealth where the property tax is viewed as a proxy for a tax on wealth, then a taxpayer who is asset rich but income poor could use this scheme to reduce his/her tax burden. In fact, tax deferral schemes can be especially useful in alleviating cash flow problems for income deficient taxpayers.

Second, and more critically, eligibility for most tax deferral programmes is restricted by age (seniors) and sometimes, disability. White one may be critical of age or disability dependent eligibility requirements for any income transfer scheme, it may be administratively practical to impose restrictions of this sort. Otherwise, if this programme were expanded to include everyone, there could be a significant increase in the number of applicants with the ensuing result that loans (tax deferrals plus interest charges on them) would be outstanding for a much longer period of time. According to some municipal officials, this would be administratively more complicated and costly (Slack, 1989).

**Grants**, designed to remove some of the property tax burden, are provided to eligible homeowners and/or remers in some countries. The value of the grant usually varies inversely with income and/or is given according to whether or not potential recipients are electly or in receipt of welfare assistance. In the province of New Brunswick in Canada, for example, grants are the only property tax credit scheme while in other provinces (e.g. Alberta and Manitoba), grants are used in conjunction with tax credits. In British Columbia and Ontario, tax credits, deferrals and grants are used for various purposes.

As a mechanism for transferring income, the grant should be evaluated in the same way as any other component of the overall provincial income-transfer scheme. By comparison with current property tax credit schemes, the disbursement of grants could be more directly linked with the payment of or reduction in property tax liability. Also, it is frequently easier to direct grants to specific individuals especially in smaller communities where hardship cases are more quickly identified, even though it may be more complex administratively to operate than the tax credit programme.

**Exempting** individuals from property taxes as is done for certain taxpayers under specific circumstances in the provinces of Newfoundland and Nova Scotia in Canada effectively removes the burden of funding local services from these taxpayers and shifts the costs on to other taxpayers. This differs from grants in that the individuals do not receive actual cash payments from the province but its impact is similar to that where grants, reductions, cancellations or refunds

completely offset property tax payments. Exempting property differs from tax deferrals in that taxes are simply postponed under the latter scheme while they are not payable under the former.

Where the exemption is available to people over a certain age only (senior citizens, for example), these exemptions, as a tax relief measure, may be deficient because they fail to consider the ability of the recipient to pay taxes. Similar deficiencies may exist where the criteria for exempting property for owner-occupiers is based strictly on taxpayer's income, and ignores property values.

**Reducing, cancelling or refunding** property taxes is generally associated with special circumstances, usually with poverty or illness. These programmes last for one year, and taxpayers are required to apply for them annually. The lost revenues are absorbed out of general municipal revenues. These programmes are used infrequently and appear to operate more appropriately in smaller municipalities where it is easier to identify worthy recipients.

**Assessment credits** are not used as widely as the other programmes but they have been suggested as a possible mechanism for relieving the property tax burden on residential properties. This scheme involves the removal of a fixed amount (determined by the local council) of market value assessment from property taxation. It works quite simply. After all properties are assessed at market value, a fixed amount of assessment is deducted from the total assessed value (similar to allowing personal income tax exemptions in a personal income tax system). Use of assessment credits applied to each piece of property would convert the property tax into a progressive tax rate. While this may appear to have merit on the surface, it would be a suspect device unless all properties owned by any particular individual were aggregated. Use of assessment credits would also result in a reduced assessment base overall. When compared with the system before the assessment credit is introduced, an equivalent amount of property tax dollars would be generated, then, through the imposition of higher property tax rates. For those properties with relatively low assessed values, the value of the assessment exemption would offset the higher tax rates and these taxpayers would be better off financially. For properties with relatively high values, the higher tax rates would more than offset the taxes saved from the availability of the assessment credit, and these taxpayers would be worse off financially. As a relief mechanism, the assessment credit, which is the same dollar value for all residential property owners, is deficient because it is based on the assessed value of property and not on the property owner's total ability to pay (Slack, 1989).

#### Summary

While tax relief for people who are deemed to have insufficient ability to pay is an important policy objective of governments, there is some question whether local governments ought to be using property tax relief instruments for income redistribution purposes. There are at least three objections to these instruments at the municipal level. First, the available evidence is not conclusive on whether or not the property tax is regressive. If it is not regressive, there is little basis for providing relief to reduce any alleged regressivity.

Second, if the tax is considered as a tax on one component of wealth (namely, property values), there may be limited support for granting property tax relief on the basis of the taxpayers income. In other words, if some recipients are asset rich and income poor, the real issue is whether people with significant assets should get relief from property tax payments, under any circumstances. Third, if taxpayers are not required to pay for local services they use, there is every incentive for them to demand larger quantities than is allocatively efficient.

Briefly, then, greater dependence on province-wide, region-wide, state-wide or nationwide income transfer schemes could more appropriately handle the income distribution issue (greater overall equity in the tax system based on ability to pay) while greater use of tax deferral schemes could handle the liquidity problem for asset wealthy homeowners. Recent trends towards the increased use of reverse mortgages, especially for elderly homeowners, can do a great deal to alleviate property tax burdens as well (Shan, 2009).

### Politics of the property tax

Despite the merits of the property tax as a good tax for local governments, it is one of the most unpopular taxes in many countries. Its high visibility, though a positive virtue by any tax policy measure, and uneven assessment practices are largely responsible for its unpopularity.

The property tax is determined annually with payment generally made on a yearly, semi-annual or quarterly basis. Each single tax payment is almost always larger than any other single tax payment and is, therefore, highly visible. Furthermore, the payment is not based on the amount of one's income (as with the personal income tax) nor is it triggered by the exchange of money for a specific good or service (as with consumption based taxes). At the same time, taxpayers often question where this money is being spent. They tend to forget that property tax revenues are necessary to fund those services that provide collective benefits to the local municipality (roads, streets, sidewalks, street lighting, fire and police protection, neighbourhood parks, libraries, public recreation and so on) and because of this, the link between taxes paid and services received is often ignored. Ironically, it is this visibility that has made the property tax one of the most efficient taxes in use. Increases are often met with public resistance so decision makers have a strong incentive to provide local services in a responsible and efficient manner.

Unfair assessment practices still exist although they tend to be less prevalent than in the past. Policies to shift part of the tax burden from the non-residential (commercial/industrial and industrial) to the residential sector – recent practice in some places and generally a good policy decision – have been perceived as a

problem by many residential taxpayers. Moreover, it is the residential taxpayer who votes, not the non-residential taxpayer. The summation of concerns such as these have led to the growing unpopularity of the property tax.

This unpopularity is behind a number of policy initiatives to alleviate taxpayer criticism. Among others, this includes property tax limits; assessment freezes or phasing-in of assessment increases; use of exemptions; shifts to user fees and specific charges; and reliance on tax relief schemes.

Property tax limits take many forms. In the USA, for example, 34 state governments have imposed property tax rate limitations on local governments. These prevent the rates from exceeding a predetermined level; for example, proposition 13 in California is the most notorious and it set the property tax rate at 1 per cent. Twenty-nine states in the USA also impose property limits on the extent to which property tax revenues can increase. These range from 2 per cent in Arizona to 15 per cent in Delaware (Brunori, 2007). Another 12 states have imposed limits on increases in assessed property values. In California, reassessment of properties can only occur at the time of sale or resale. Between sales, assessment may only increase by 2 per cent per year. In Michigan, reassessment is restricted to the lesser of 5 per cent or the inflation rate (O'Sullivan, 2001; Brunori, 2007).

Market value assessment has been criticized on the ground that rapid increases in market values may increase property taxes beyond taxpayers' ability to pay them. California tried to address the volatility problem by updating assessments to market value only when the property is sold and increasing assessment, thereafter, by 2 per cent annually. In the UK, every property was assessed at its market value in April 1991 and placed into one of eight valuation bands (Slack, 2004). The higher the band, the higher the tax rate. A property is not reassessed once it has been placed in a higher band. Changes in value do not affect a property's assignment to a given band unless the size of the property changes. Two provinces in Canada have restricted annual residential assessment increases – one to the rate of inflation until the property is sold at which time a new assessed value is established (Nova Scotia) and the other until time of sale (Prince Edward Island). A third province (Ontario) recently switched from annual reassessments to a four-year reassessment cycle with a phase-in of changes over the four intervening years.

Such tax and assessment limits while popular politically almost always generate serious short- and long-run consequences. In general, they are unfair and inefficient in their impact and often create distortions that are hard to overcome in the long run. Such limits, however, have created at least one positive outcome. Local governments, in many places, have turned to alternative revenue sources for funding some of their services. For example, there has been a trend towards greater reliance on user fees for funding solid waste collection and disposal; increased reliance on fuel taxes for public transit and transportation and even congestion or toll charges in some large cities and metropolitan areas (Kitchen, 2008).

Also, there is really no solid argument for continuing with property tax exemptions as was discussed above. Finally, concern over assessment volatility and property tax increases should not be addressed through limitations or restrictions on either, but rather through income transfers targeted to the poor of specific income tax relief programmes.

#### Future for the property tax

Perhaps the most certain thing that can be said about the property tax is that it is here to stay! Except for the Scandinavian countries where local property taxes do not exist, it has been the mainstay of municipal finance systems in virtually every industrialized and developed country for many decades and will continue to be there in the future. More recently and as functioning real estate markets have developed, its importance has grown in China, Russia and many eastern European countries.

Its strength lies in its solid attributes for funding local services – the tax base is immobile; the revenue yield is largely predictable and stable; the residential portion is unlikely to be exported; it is highly visible and fair as long is it covers the cost of providing those services that provide collective benefits to the local community; and if it is only a local tax (senior governments not involved), harmonization problems and wasteful tax competition are seldom a problem. This, however, does not mean that it is the only tax that will be used by many local and municipal governments in the future. There are solid arguments for giving cities and large metropolitan areas access to more than one tax as long as the local governing body sets the tex rate (Kitchen and Slack, 2003; Kitchen, 2004, 2008). This includes access to the personal income tax (either employee or resident based) and it includes access to one or more consumption based taxes (e.g. general sales, fuel taxes, motel and hotel occupancy taxes). Indeed, local governments, especially cities and large metropolitan areas in many countries, currently have access to more than one local tax (OECD, 2009) and this trend is likely to continue.

At the same time, there is every reason to believe that initiatives to impose assessment and property tax limits will continue. While these often create fiscal problems for local governments, one positive effect could be a movement to a greater reliance on user fees and charges as long as the fee and charge structure is efficiently and fairly designed. Indeed, this has happened in many places and seems to be growing.

#### **Summary**

For a variety of reasons, a local property tax is a good tax. There is, however, no uniform property tax base or method of assessment that applies in every country. In some countries, the tax base is land only. In a few countries, only buildings constitute the tax base. In most countries, however, both land and buildings are taxed. The basis for assessment is also wide ranging. In some countries, the value

of the tax base is determined by market value, or site value. In other countries, the value is based on building area and property area – this is referred to as unit value. In a few countries, a mix of these approaches is employed in determining value.

Of these possible tax bases, valued based assessment systems and market value, more specifically, are deemed to be superior to area based systems in countries where there are fully operational property or real estate markets. Here, market values can be determined. Where property or real estate markets are not fully developed such as in developing and transitional economies or where there are a number of impediments to their operation, area based assessment is likely to be superior.

The success of any assessment system depends on a number of critical parts. A uniform assessment system is needed if one is to establish a tax base that is fair, transparent and accountable. Uniformity is more likely achieved if a few practices are followed. First, within a region, state or province, all assessors work from a standard and uniform assessment manual that is updated frequently to reflect changing conditions. Second, assessors should be required to pass specific education and training programmes on assessment practices and procedures. Third, although the evidence is sketchy, assessors working for centralized assessment agencies seem to be more successful (because they are more likely to work at arm's length) than those working for municipalities in achieving uniformity in assessment. Fourth, the more frequent the reassessment, the fairer the assessment system, leading to fewer surprises for taxpayers, fewer complaints and fewer appeals. Fifth, there should be an effective appeals mechanism in place to correct for perceived inequities in the assessment system. Finally, wherever possible, mass appraisal techniques should be used to improve the quality of the assessment system and to minimize its impact on costs.

The second major component of the property tax system is the tax rate. Here, it is generally conceded that each level of government (metropolitan and local, for example) should be responsible for setting its own property tax rate(s). Variable tax rates should be used when the cost of providing municipal services varies by property type and location. Variable rates, when compared with a uniform rate, are more likely to discourage urban sprawl and to minimize the extent to which the local property tax is exported to other jurisdictions.

Business properties (commercial and industrial) should not be over-taxed visà-vis residential properties. Limits (by a senior level of government) should not be imposed on tax rates set by local governments unless they are to prevent local taxing authorities from imposing unnecessarily high rates on commercial and industrial properties vis-à-vis residential properties or unless they are to protect the policy interests of a more senior level of government.

Tax billing and collection is an administrative function that benefits from economies of scale and should, therefore, be administered on a regional basis. Other land based taxes should not be used by local government unless they are designed to fund the costs of capital infrastructure needed to service specific properties or neighbourhoods, or unless these charges fund higher service levels or more services for specific properties or neighbourhoods.

Uncertainty over whether or not the property tax is regressive suggests that extreme caution should be exercised before specific property tax relief schemes are introduced. The property tax should be viewed as a tax that funds a bundle of local government services that provide collective benefits to the local community. To the extent that it imposes an unfair tax burden on lower income households, this tax burden should be treated in the same way that every other income distributional concern should be treated; that is, relief should come in the form of a comprehensive tax relief scheme administered by the regional or central government and not a property tax relief scheme directed at specific property owners and implemented by local governments.

Although politics plays a role in the structure of every tax, the visibility and general unpopularity of the property tax has made it one of the most politicized taxes in almost every country where it exists. This has led to the introduction of exemptions, assessment freezes and property tax limits. All of these serve to make the property tax less efficient, less transparent, less accountable and more inequitable than it should be. As for the future of the property tax, it is here to stay. It will continue to be an important source of revenue for local governments in most countries over the next few decades.

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