

Land and Property Taxation: A Review

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Land and Property Taxation Around the World: A Review

I. Introduction

Following this brief introduction, Part II of this paper sets out briefly the rationale for taxing land and property, both as a source of local government revenue and in terms of its effects on efficient land use.

Taxes on land and property have both fiscal and non-fiscal effects. The revenue such taxes produce is often an important source of finance for local governments. The extent to which those governments have control over property taxes is thus often an important determinant of the extent to which they are able to make autonomous expenditure decisions. The level, design, and control of property taxation are thus, in many countries, critical elements in effective decentralization policy.

But property taxes are not always local taxes, and whether they are or are not local, like all taxes they must also be considered from a more general policy perspective. From this perspective, property taxes may be viewed, depending upon one's assumptions, the environment in which they are applied, and their design and effectiveness, as an equitable and efficient way of raising revenue or they may be considered to be a regressive and undesirable form of public finance.

Simple, general conclusions on these important issues do not emerge easily from an examination of the complex structure of property taxes around the world. As an example, consider Germany, in which two variants of land tax are imposed on (in effect) four different bases at five different “base rates” which in turn are modified by locally-determined “leverage factors.”¹ Other than noting that the revenues from this complex set of taxes are small and that reform has proved politically impossible so far, it is hard to say anything very definite about the effects of such a system. Germany is not alone in this respect. In most countries, taxes on land and property are among the oldest forms of all taxes. Old taxes need not necessarily be “good taxes,” as the saying has it, but they almost invariably have, over the years, become encrusted with various peculiar features that prove very difficult to alter.

This point is made clear by the 25 case studies prepared as part of this study and presented in the annexed report entitled *Land Taxation in Practice: Selected Case Studies*. Part III, the main section of this paper, summarizes some of the major findings of these reviews of the taxation of land and property in 25 countries (five in each of five regions – OECD, central and eastern Europe, Asia, Africa, and Latin America). The focus of this review is on the potential contributions of the property tax to the revenues of urban and

¹ See the section on Germany in the accompanying document, Richard M. Bird and Enid Slack, eds., *Land Taxation in Practice: Selected Case Studies*, Toronto, March 2002. Unless otherwise cited, all references to specific country experience in the present paper are based on material in this study.

rural governments and to more efficient land use. Since the ability of the property tax to make these contributions largely depends upon the characteristics of the tax (tax base, tax rates, and administration), this section of the paper reviews the information collected on these characteristics in the 25 case study countries. In addition, such other land-based taxes as land transfer taxes and development charges are discussed briefly.

Part IV of the paper contains a brief review of the experience with reform of the property tax in five countries (one in each of the five regions), again drawing heavily on the case studies in the annex.

Finally, the concluding Part V of the paper summarizes briefly the extent to which land taxes can contribute to local government revenues and to more efficient land use, noting that different forms and levels of land and property taxation are likely to prove suitable in different environments. It has been said that one size never fits all in fiscal design, and with respect to no tax does this saying seem truer than with respect to this oldest form of taxation.

As noted above, this general report is accompanied by an extensive annex entitled *Land Taxation in Practice: Selected Case Studies* containing the 25 case studies that constitute the main raw material utilized in the report. The countries covered in these case studies were selected to cover most regions of the world and also, to some extent to depict different “styles” or practices in taxing land and real property. Although the sample chosen is not representative in any statistical sense, and the information obtained is in any case too diverse and disparate to lend itself to statistical manipulation, many of the conclusions reached on the basis of this study emerge also from the earlier cross-country studies noted below.

For example, the diversity in the application of land and property taxes among these 25 countries is evident: there are differences in the determination of the tax base, the setting of tax rates, and the ability to levy and collect the tax. In some countries, one property tax covers all types of property. In others, there are different taxes for different components of real property. Countries may, for example, have separate taxes on land and buildings; separate taxes on residential and non-residential property; or separate taxes in urban and rural areas.

Not only are there significant differences in how land and property are taxed across countries, there are often significant differences within countries. The greater is the degree of local discretion in establishing the tax base and setting the rates, the more diversity there will be in property taxes within a country. This is particularly true in federal systems, in which the state or provincial government often provides the legal framework under which municipalities can operate. For this reason, some of the case studies focus on a specific province or state within the country and may not provide comprehensive information for the country as a whole.

Indeed, information on local taxes is often surprisingly difficult to secure and seldom easily comparable, even within a single country. Furthermore, although the paper

describes recent reform efforts in a few countries, as shown in many of the case studies other reforms are currently under consideration in a number of countries, so that some of the information included here may already be obsolete.

For this and other reasons, a certain degree of modesty is called for with respect to what we have attempted in this paper. Many previous comparative studies of land and property tax have been carried out at different times, for different countries, and for different purposes. Some studies have focused on developed countries (OECD, 1983), some on transitional countries (Malme and Youngman, 2001), some on developing countries (Municipal Development Programme, 1996, Rosengard, 1998), and some have cast their nets more widely (Youngman and Malme, 1994, McCluskey, 1999, Brown and Hepworth, 2000, Andelson, 2000). Some studies have focused on rural land taxation (Bird, 1974, Strasma et al., 1987), some on urban property taxes (Bahl and Linn, 1992), and some on land value taxation as opposed to property taxation more generally (Andelson, 2000, McCluskey and Franzsen, 2001).

The studies cited cover many countries in addition to those covered in the present volume – for example, Jamaica, a country not included here, is covered by Andelson (2000), McCluskey and Franzsen (2001), and McCluskey (1999), and Estonia, another country not included in this study, is covered by Andelson (2000), Brown and Hepworth (2000), and Malme and Youngman (2001). In all, land and property tax systems in at least 40 additional countries to those included in the present study are covered in the studies mentioned. Moreover, there are, of course, many studies of individual countries readily available in the literature, as noted to some extent in the case studies included in the present report.

If one adds to all this comparative and descriptive material the hundreds, if not thousands, of papers and books devoted to various aspects of land taxation more generally, it is clear that the present paper, although we have attempted to be as comprehensive as time and resources permitted, is inevitably far from the last word on this subject. Complexity, diversity, inadequate and imperfect information, and change have long been characteristics of property taxes in many countries. The countries studied here are no exception to this rule. While we venture some generalizations about land and property taxes in the final section of this paper, we are well aware that the devil in land taxation is in the details, and that the details are often devilishly hard to determine.

II. The Role of the Property Tax

II.1. As a Source of Revenue

Tables 1 and 2 provide a useful introductory overview of the role of the property tax as a revenue source. Four key conclusions emerge from these tables and from the GFS data that underlie them:²

² For more data and discussion, see Roy Bahl (2002). We are grateful both to Roy Bahl and to Bayar Tumennasan for providing these data and for permitting us to make use of their work.

1. Taxes on land and property are at best minor revenue sources in all countries. For the developing countries included in these tables, for example, such taxes accounted for only about 0.4% of GDP (Table 1) and about 2% of total tax revenues in the 1990s, down slightly from earlier decades, although the equivalent share for the OECD countries remained at a bit more than 1% of GDP (Table 1) and about 4% of all tax revenues throughout the period.³
2. Nonetheless, as Table 2 shows, property taxes are important sources of subnational revenue in many countries, and more so in developing than in developed or transition countries. In terms of subnational taxes (instead of subnational revenues, as shown in Table 2), in the 1990s, property taxes accounted for 40% of all subnational taxes in developing countries, 35% (up from 30% in earlier decades) in developed countries, although only 12% in transition countries. In the same period, property taxes financed a bit more than 10% of subnational expenditure in developed and developing countries, although little more than half that much in transition countries.
3. Property taxes are much more important in rich (OECD) countries than in developing or transition countries. Although these details are not shown in the table, for the last year for which all data were available (1995) the highest property tax to GDP ratio (4.1%) was in Canada, followed by the United States (2.9%), and Australia (2.5%): it is likely not a coincidence that all three are rich federations. On the other hand, the lowest ratio recorded (0.01%) was also in a rich federal country (Austria), and some developing and transition countries (South Africa, Latvia) had relatively high (over 1%) ratios, so there is clearly more to it than simply wealth, as we shall discuss later in connection with Table 4.
4. None of these characteristics has changed much in recent decades, with the exception of a relative decline in the importance of property taxes as a share of subnational revenue (and expenditure) in developing countries.

Dependence on property taxes as a source of local government revenue varies across jurisdictions depending upon many factors, such as the expenditure responsibilities assigned to local governments, the other revenues available to them (such as intergovernmental transfers, user fees, and other taxes), the degree of freedom local governments have with respect to property taxation, the size and growth of the tax base available to them, and their willingness and ability to enforce such taxes.

The PT/GDP ratio reported in Table 1 may, for example, be thought of as the outcome of multiplying a number of other ratios, as follows:

³The data in Tables 1 and 2 do not include taxes on land and property accruing to central governments. Subnational governments comprise both regional (province, state) and local (municipal) governments. Since in most countries property taxes basically accrue to local governments, we shall often simply refer to them as local taxes.

- MV/GDP – the ratio of (market) property values to GDP
- AV/MV – the ratio of assessed base to market values (assessment ratio)
- TV/AV – the ratio of taxable base to assessed base (exemptions)
- T/TV – the ratio of taxes assessed to taxable base (statutory tax rate)
- T^*/T – the ratio of taxes collected to taxes assessed (enforcement)⁴

Governments can do little directly with respect to the first of these ratios – although, as noted below, local governments may in some circumstances be able to affect the share of the potential base that is located within their jurisdiction. A more meaningful comparison may thus be to compare property tax collections not with GDP but rather with (estimated) market values.

This ratio is commonly called the “effective rate of property tax” ($ERPT = T^*/MV$). In the United States, for example, a recent study found the median effective rate on a house valued at \$US150,000 to be 1.2% in 1998.⁵ The same study found the median ERPT on commercial property to be 2.3% and on industrial property to be 1.7%. The range from state to state was impressive, however: with respect to residential property, the estimated state ERPT ranged from 0.4% to 2.9%. The range was almost the same with respect to industrial property (0.4% -3.0%) but with respect to commercial property it was considerably greater, at 0.7% to 6.0%.

These numbers suggest two conclusions:

1. Property taxes are generally heavier on non-residential (and especially commercial) properties than on residential (single-family) homes.⁶
2. When there is considerable local discretion with respect to property taxes, as is the case in the United States, there are also likely to be great differences in effective tax rates.

Relatively little information on effective rates appears to be available for developing and transition countries, but, as discussed later, both these conclusions are likely to hold much more widely than just in the U.S. case. In addition, as a few of the case studies reported in the accompanying annex demonstrate, it seems clear that the ERPT tends to be

⁴ This is a variant of the presentation in Bahl (2002). The ratio T^*/T may be broken down in a number of ways. For example, some taxes levied in year 1 may not be collected in that year – arrears. On the other hand, some taxes collected in year 1 may pertain to taxes levied in prior years. Penalties and interest with respect to late payments may be shown as tax collections or as a separate item. Some taxes assessed may be appealed and, if the appeal is successful, refunded. It is thus not always clear exactly what is encompassed in T^* in different countries.

⁵ Data for selected cities in all states (excluding Louisiana) from 50-State Property Tax Comparison Study, Minnesota Taxpayers Association, January 1999.

⁶ Multi-family dwellings (apartment buildings) are generally taxed much more heavily than single-family homes, but this important issue will be touched on only very briefly later in this paper.

considerably lower in most developing countries. For example, an estimate of 0.41% is reported for Colombia, 0.07% for the Philippines, and a range from 0.01% to 0.41% for Indonesia.

Of course, such numbers do not tell us *why* effective property taxes are so low, but it seems likely that all the administrative factors mentioned above play a role. It is clear from the case studies, for example, that the assessment ratio is low in many countries. It is also clear that there are often – perhaps especially in some transition countries – very large exemptions. Moreover, statutory rates are generally low, and collection efforts poor, as evidenced, for instance, by high arrears ratios.

As we shall develop in detail in Part III of this paper, in many – indeed, most – developing and transition countries local governments as such have very little scope to affect many, and in some cases any, of these factors. Although it is often surprisingly difficult to determine exactly how much “autonomy” local governments have in fiscal matters, it appears that in many such countries assessment, exemption, rates, and sometimes even collection are essentially controlled by higher-level governments.⁷ The present and future of subnational property taxes are thus inextricably related to much broader issues related to intergovernmental relations and fiscal decentralization more generally.

To conclude this introductory quantitative overview, we shall consider a recent study of the factors determining property tax “effort” for the countries covered in Table 1 above. Table 3 sets out some salient characteristics of our case study countries, and Table 4 reports some of the results of the study just mentioned for those of our case study countries included in the sample.⁸

In Bahl (2002) the PT/GDP ratio is taken to reflect a number of independent factors – the wealth of the country (as measured by the level of its per capita GDP), its population, and its degree of urbanization. A regression equation including these variables explains (statistically) about half of the observed variation across countries and suggests that countries tend to rely more heavily on property taxes as income levels rise and they become more urbanized.

Another specification of this equation, including also the degree of decentralization (as measured by subnational expenditures as a share of total government expenditures) as an independent variable, was used to calculate “predicted” PT ratios for each country. Property tax “effort” (as shown in Table 4) can then be calculated as the ratio of the actual ratio to the predicted ratio. That is, if a country’s actual ratio is exactly equal to the ratio predicted, given the values of the independent variables, then the reported effort would be 1.00. If the actual ratio is greater than the predicted ratio, effort is greater than 1.00, and so on.

⁷ By far the most systematic review of this question is OECD (1998, 2001). Unfortunately, similar work has not yet been done for non-OECD countries.

⁸ See Bahl (2002) for further results from this study. Again, we are grateful to Roy Bahl and Bayar Tumennasan for giving us access to this useful study.

While such calculations are obviously crude, results such as those reported in Table 4 permit us to make two important observations:

- Actual ratios are not a good predictor of effort: some countries (e.g. Canada) have both high ratios and high effort; others (e.g. UK) have high ratios but low effort; still others (e.g. Nicaragua) have low ratios and – at least by this calculation – high effort; and, finally, some countries (e.g. Mexico) have both low ratios and low effort. How much a country collects in land and property taxes is not, it seems, a reliable guide to how hard it is trying.
- On the other hand, it follows from the same information that countries that make similar efforts may secure very different results (compare, for example, Germany and Mexico on the low side and Canada and South Africa on the high side), and, correspondingly, that countries with similar results (e.g. Germany and Poland) may be making very different efforts.

From a policy perspective, what this simple exercise suggests is, of course, that while countries are inevitably constrained in what they can do by environmental factors, there often appears to be considerable leeway for many countries to do better than they have been doing. Low effort countries such as Mexico and Germany, for example, could clearly collect much more in property taxes if they wanted to do so, although it would be much harder for low-income Mexico than for high-income Germany to raise, say, an additional 1% of GDP in such taxes (Bird, 1976). As is so often the case in fiscal matters, many poor countries could do more than they do in terms of taxing land and property, but no matter how much they do they are unlikely to reap the same relative rewards for their effort as more fortunate countries. To them that hath, it seems, more comes more easily, in this as in other respects.

II. 2. As a Local Tax

The property tax has, historically, been associated with local government in most countries. One reason that taxes on land and property have been considered to be especially appropriate as a local revenue source is that real property is immovable -- it is unable to shift location in response to the tax. Although a change in property tax may be capitalized into property values in a particular community, and in the long run tax differentials may affect where people locate, these effects are of a smaller magnitude than those that would occur with income and sales taxes at the local level.

Another reason why property taxes are considered to be appropriate as a source of revenue for local governments is the connection between many of the services typically funded at the local level and the benefit to property values. Fischel (2000), for example, has argued that the property tax in the United States is like a benefit tax because taxes approximate the benefits received from local services. To the extent that this is the case, local property tax finance of local services will promote efficient public decisions since

taxpayers will support those measures for which the benefits exceed the taxes. Both the benefits derived from such local services as good schools and better access to roads and transit, etc. and the taxes used to finance such services are capitalized into property values. Since taxpayers are willing to pay more for better services and lower tax rates, either will translate into higher property values.

Of course, this analysis assumes that (1) local property taxes in fact finance services that benefit property values, (2) that both tax rates and service levels are decided by local voters, (3) that voters who wish to “buy” other combinations of services and tax rates are free to move to other jurisdictions, (4) that voters – impelled by their sensitivity to property values – act rationally in response to such signals, and (5) that local governments do what voters want them to do. The strength and validity of many of these links seems suspect in the context of many countries. Moreover, this line of argument seems even more tenuous when it comes to explaining the generally higher taxation on non-residential property observed in many countries. Although we shall not discuss this question here, as Bird and McKenzie (2001) argue, an income-type value-added tax appears to be a much more sensible way to “price” local services to businesses than a property tax.

More commonly held perceptions see the property tax as tax on capital or, to the extent it falls on housing, as a tax on housing services. Zodrow (2000), for example, argues that the property tax in the United States results in distortions in the housing market and in local fiscal decisions. In particular, since the US property tax, which is based on market value, falls on both land and improvements it both discourages building and results in the underutilization of land. The result is that the country ends up with less capital per unit of land than is economically efficient. Homeowners who improve their house, for example, will face higher taxes as a result and will thus be discouraged from doing so. As George (1879) said, and as many others have argued since, a tax on land values alone would avoid this economic inefficiency and would indeed stimulate the efficient use of land. We shall return to this point below.

Finally, consider for a moment the question of incidence – who pays the property tax, and is it an equitable tax? There appear to be as many answers to these questions as there are views about the property tax. For example:

- Those who view taxes on residential real property as essentially taxes on housing services tend to think that property taxes are inherently regressive, since, as a rule, housing constitutes a relatively larger share of consumption for poorer people.
- Those who view property taxes as essentially a tax on capital tend to think that such taxes are inherently progressive, since, as a rule, income from capital constitutes a relatively higher share of income for richer people.
- Those who view the portion of the tax that falls on land as being paid out of economic rent consider it to be inherently equitable to tax such “unearned increments” arising (often) from public actions.

- Those who view property taxes as essentially benefit taxes tend to think that there is no more sense in asking if the “price” of local public services (the property tax) is regressive than in asking if the price charged for anything else is regressive: voluntary exchange (“taxes” – really generalized user charges -- for services) does not raise any question of incidence.

Although hardly conclusive, the empirical evidence on capitalization on the one hand and “tax exporting” on the other, at least in the United States and Canada, suggests that there may be something in all of these views.⁹ In the end, it seems, what one beholds in the property tax in terms of equity appears to depend to a large extent on what one thinks of the property tax in the first place.

Quite apart from the obscurity of its incidence, at least four characteristics of the property tax differentiate it to some extent from other taxes: its visibility, its inelasticity, its inherent arbitrariness, and, in some countries, the extent to which it reflects local autonomy.

- As usually applied, the property tax is a very visible tax. Unlike the income tax, for example, the property tax is not withheld at source. Rather, it generally has to be paid directly by taxpayers in periodic lump sum payments. This means that taxpayers tend often to be more aware of the property taxes they pay than they are of other taxes.¹⁰ Moreover, to a considerable extent, the property tax finances services which are very visible, such as roads, garbage collection, and neighbourhood parks. Tax visibility is clearly desirable from a decision-making perspective because it makes taxpayers aware of the costs of local public services. This awareness enhances accountability, which is obviously a good thing from both an economic (hard budget constraint) and political (democratic) perspective. It does not, however, make the property tax popular. On the contrary, as we discuss in Part IV below, it seems clear that it is harder to raise (or reform) property taxes than other taxes.
- The base of the property tax -- no matter which of the bases discussed in Part III below is employed -- is invariably relatively inelastic, meaning that it does not increase automatically over time. Bahl (2002), for example, notes that the GDP elasticity of the property tax has been about unity for decades. Property values generally respond more slowly to annual changes in economic activity than do incomes.¹¹ Area, of course, responds even more slowly. Furthermore, as discussed further in Part III, few jurisdictions update property values for taxation

⁹ This literature is reviewed in most textbooks. For one example, see Bird and Slack (1993).

¹⁰ In some cases, however, mortgage institutions include property tax payments with monthly mortgage payments. This procedure reduces the visibility of the property tax for taxpayers who pay their taxes along with their mortgage payments.

¹¹ There may be exceptions of course, as for example in the case of the well-known “bubble” in asset prices in Japan in the 1980s, where at one point the effective rate of the fixed property tax in Tokyo was estimated to have fallen to 0.05% (Ishi, 2001).

purposes on an annual basis. As a result, in order to maintain property tax revenues in real terms (let alone to raise property tax revenues), it is necessary to increase the rate of the tax. As with visibility, inelasticity leads to greater accountability (taxing authorities have to increase the tax rate to increase tax revenues) but it also leads to greater taxpayer resistance.

- Most taxes are based on flows – income or sales. The tax base may sometimes be the source of argument between taxpayer and tax authority, but there is, in principle, a measurable economic activity on the basis of which the tax is levied. In contrast, taxes on land and property are (generally) based on stocks – asset values. Unless the asset subject to tax is sold (by willing buyers to willing sellers) in the tax period, someone has to determine the value that serves as the basis on which to assess the tax. Valuation is inherently and inevitably an arguable matter: if there is a “self-assessment” system, owners are likely to undervalue their property; if there is an “official” (cadastral) assessment system, owners are likely to feel that their property is (at least in relative terms) overvalued. In the end, someone has to determine the tax base for the property tax in a way that is not true for any other significant tax. It is not surprising that the results are often perceived to be unfair and arbitrary. It is also not surprising that the process of obtaining “good” (close to market, fair) valuations is not likely to be cheap. In short, to administer a property tax at the same level of fairness (non-arbitrariness) as most other major taxes is both a costly operation and one the results of which are unlikely to be accepted as fair by most taxpayers.
- Finally, to the extent property taxes are levied only by local governments they obviously act as a main support to local autonomy. Of course, the extent to which such autonomy is either desired or attained is very country-specific. Even in such countries as Canada and Australia, with important local governments and important local property taxes, not all taxes on property are levied by local governments. In some countries, such as Latvia and Chile, the property tax is much more a central than a local tax. Indeed, if one defines a “purely local” tax as one in which local governments can (1) decide whether or not to levy the tax, (2) determine the precise nature of the tax, (3) establish the base on which to tax individual taxpayers, (4) determine the tax rate, and (5) enforce the tax, very few countries have such taxes. As discussed further later in this paper, in most developing and transition countries, “local” property taxes are, in most of these respects, more “central” than “local” in nature. Since, as Bird (2001) argues, an essential ingredient of responsible local autonomy – or, if one prefers, of a “hard” subnational budget constraint – is that tax rates be set locally (and not by a senior level of government), the property tax systems existing in most countries considered here are still quite far from achieving this goal.

III. Taxes on Land and Property: A Survey.

This section of the paper has two main tasks. First, we present in summary form some of the results of the 25 case studies carried out as part of this study and reported in full in the annex “Land Taxation in Practice: Selected Case Studies.” Table 5 sets out the main property taxes in each of these countries and indicates their importance as a source of local revenues. Second, we discuss the major policy alternatives with respect to taxing land and property – the choice of tax base, exemptions, methods of determining the tax base, tax rates, differential treatment of different classes of property (farms, residences, etc.), and the process of tax administration. These two tasks are undertaken simultaneously in the sense that the discussion is organized thematically and illustrated by case study material. Finally, at the end of Part III, in section III.6, we consider more briefly some of the other taxes levied on land found around the world such as land transfer taxes and development charges, unearned increment taxes, and the like. Experience with reforming land and property taxes is reviewed in Part IV of the paper.

III. 1. What is Taxed?

Property taxes are generally levied on all types of properties – residential, commercial, and industrial, as well as on farm properties. Sometimes different categories of property are treated differently, as discussed in section III. 4 below. Sometimes certain classes of property, or property owner, or uses of property, are exempt. Sometimes land only is taxed. We shall first discuss the question of taxing land vs. land and improvements and then consider exemptions.

III.1.1. Land vs. Land and Improvements

Some countries tax only land. A few tax only buildings. Most tax both land and buildings (or “improvements”), usually together but in some countries (e.g. Hungary) separately. Some also tax machinery (or “tangible business assets”). The choice of tax base in the 25 countries is summarized in Table 6. In most of the countries studied, the property tax is levied on land and improvements. In some countries, however, only the land portion of the property is taxed (e.g. Kenya and some parts of Australia and South Africa). In Tanzania, unusually, only buildings are taxed. In countries where both land and improvements are taxed, the land portion is sometimes taxed more heavily than improvements.

As mentioned earlier, the taxation of land only (also known as “site value taxation”) potentially may improve the efficiency of land use. In principle, a tax on site value in effect taxes location rents (the returns from a particular location regardless of the improvements to the site). Since improvements to land (such as structures) are not taxed, the owner has an incentive to develop the land to its most profitable use. Compared to a property tax on land and buildings that discourages investment in property, a site value tax thus encourages building and improvements.

Assuming land is in fixed supply (the supply of land offered for development is unresponsive to price changes), a tax on land falls on landowners and cannot be shifted to others. Increased site value taxes will thus be capitalized into lower property values. Since the tax is borne proportionately more by owners of land than is the case with a tax on both land and improvements and since landownership is unequally distributed, such a tax should be more progressive (borne relatively more heavily by high-income taxpayers than low-income taxpayers).

Site value taxation thus scores well in terms of both efficiency and equity. One problem with taxing land alone, however, relates to the administration of the tax. Accurate land valuation presents a challenge to assessors because most urban real estate sales combine the value of land and improvements. Site value taxation requires the subtraction of the value of the improvements from the value of the property as a whole in order to derive an assessed value for the land. For this reason, some consider that such taxation is unacceptably arbitrary. On the other hand, some authors have argued that valuation of land alone is probably easier than valuation of property (Netzer, 1998). Instead of assessing the value of land and improvements and then subtracting the value of improvements, site values per square meter could, it is argued, be estimated directly from sales and demolition records.

This debate has not been resolved in the literature with respect to developed countries. But it must be remembered that the original arguments for site value taxation (George, 1879) were made in a context in which cities such as San Francisco were growing rapidly – where land that was worthless one day was worth a fortune the next owing to the influx of population. Along these lines, it has sometimes been suggested that valuing land separately may be less of a problem in developing countries in which urban areas are growing rapidly (Bahl, 1998). In many such countries, land and improvements are in practice assessed separately in any case, with land value being estimated on the basis of a land value map and building value in accordance with construction cost tables. On the other hand, even if assessment is done separately, if the rate is uniform and taxpayers can only appeal the total value, however, the division between the two components becomes arbitrary.

Another problem has to do with the potential revenues that can be collected from a site value tax. Since the tax base is considerably smaller than the value of land and improvements combined, site value taxation can only produce comparable revenues at very high rates of tax. This is a problem both because higher rates create greater distortions and because it is likely to be politically easier to levy a lower property tax rate on land and improvements than a higher tax rate on the land portion only (Bahl, 1998).

III.1.2 Exemptions

As discussed in the annex (Land Taxation in Practice: Selected Case Studies), in each of the 25 countries covered in this study, some properties are exempt from the property tax base. Exemptions may be based on various factors such as ownership (such as government-owned property), the use of the property (such as properties used for charitable purposes), or on characteristics of the owner or occupier (such as age or disability). In some countries, exemptions are granted by the central or state government;

in other countries, exemptions are granted locally; in some, both levels can grant exemptions.

Although there is great diversity in the use of exemptions, some properties are exempt in most jurisdictions. For example, property owned and occupied by government is generally exempt from property taxes. Other property types that are often exempt include colleges and universities, churches and cemeteries, public hospitals, charitable institutions, public roads, parks, schools, libraries, foreign embassies, and property owned by international organizations. In some countries, agricultural land and principal residences are also tax exempt.

In some instances governments make payments in lieu of taxes on their properties. These payments in lieu are generally negotiated between governments and are often much less than the property taxes would be. In Canada, for example, it is the federal government, and not the taxing authority, which determines the values and rates to be used in the payment in lieu calculation.

Exemptions have been criticized on a number of grounds.

- First, to the extent that people working in government buildings or institutions use municipal services just as workers do in other buildings, they should be taxed (Bahl and Linn, 1992, p.100).
- Second, the differential treatment means that owners/managers in payment in lieu or taxed properties face higher costs than owners/managers of exempt properties. This differential will have implications for economic competition among businesses and between businesses and government (Kitchen and Vaillancourt, 1990).
- Third, differential tax treatment affects location decisions, choices about what activities to undertake, and other economic decisions.
- Fourth, exemptions narrow the tax base and thereby increase the taxes on the remaining taxpayers or reduce the level of local services that can be offered.
- Fifth, the proportion of tax-exempt properties varies by municipality, thereby creating disproportionate tax burdens across communities. This result is especially troublesome when higher-level governments determine what is exempt from local taxation.

There may be a case for favouring certain property holders (such as churches and charitable organizations) to encourage their presence in the local community. If such a case can be made for preferential treatment, then it has been argued that these organizations should be rewarded directly with a grant rather than on the basis of their

property holdings (Kitchen, 1992). Unlike a property tax exemption, in principle such grants are subject to regular review by elected representatives.

In any case, when property tax exemptions are granted for any reason, all exempt property should nevertheless be assessed in the same way as other properties so that the value of the exemption is known. Furthermore, payments in lieu of taxes should be based on the assessed value and should reflect the taxes that could have been collected. Only when this is done – which is almost never the case in practice – will the full cost of land use for a particular purpose be taken into account in resource allocation decisions.

III.2. How is It Taxed?

Once the taxable base has been determined, the next step is to determine the value to which the tax rate is to be applied. In general, two distinct assessment methodologies are used for property taxation: area-based assessment and value-based assessment, with the latter being divided into capital and rental value approaches (Youngman and Malme, 1994; McCluskey, 1999). In addition, some countries use a system of self-assessment. The extent to which these approaches are used in the case study countries is summarized in Table 6.

III.2.1. Area-based Assessment

Under an area-based assessment system, a charge is levied per square meter of land area, per square meter of building (or sometimes “usable” space), or some combination of the two. Where measures of area are used for both land and buildings, the assessment of the property is the sum of an assessment rate per square meter multiplied by the size of the land parcel and an assessment rate per square meter multiplied by the size of the building. The assessment rates may be the same for land and buildings, or they may be different. For example, a lower unit value per square meter might be applied to buildings to encourage development.

A strict per unit assessment results in a tax liability that is directly related to the size of the land and buildings. With unit value assessment, the assessment rate per square foot is adjusted to reflect location, quality of the structure, or other factors. Market value has an indirect influence on the assessment base through the application of adjustment factors. For example, the assessment rate per square meter might be adjusted to reflect the location of the property within a particular zone in the city. Although the specific location of the property within the zone is not taken into account, properties in different zones will have different values.

The adjustment factors are derived from average values for groups of properties within each zone and do not reflect the characteristics of each individual property. When the groups are defined narrowly enough, however, unit value begins to approximate market value. For example, a zone could be defined anywhere from an entire city to specific neighbourhoods to properties on one side of a street.

As Table 6 shows, area-based assessments are commonly used in Central and Eastern Europe where the absence of developed property markets makes it difficult to determine market value. They are also used in Germany (in the former GDR), China, Chile, Kenya, and Tunisia.

In Tunisia, for example, the rental tax (*taxe sur les immeubles bâtis*) requires municipalities to use national values for “covered” square meters – the area built on -- to establish the rental tax roll. The values set by presidential decree vary, depending upon the size of the house and the neighbourhood. The municipalities apply four tax rates on area basis, where areas are classified according to the availability of six services: garbage collection, street lighting, covered roadway, covered sidewalk, sanitary sewers, and rain water sewers. The tax rate is set at 8 percent if there are one to two services; 10 percent if there are three to four services; 12 percent if there are five to six services; and 14 percent if there are other services or better quality services.

Another, widespread, example of unit-value assessment is in the assessment of agricultural land. In many countries, farm property is assessed at so much per square meter, with the unit value varying with the location (region, accessibility to markets), fertility (irrigation, climatic conditions, soil conditions, hilliness), and sometimes with the crops grown. Such values are sometimes established on the basis of detailed cadastral studies, and sometimes on the basis of sales data on comparable property. In practice, the values for agricultural land often seem, like other presumptive tax bases, to be established on the low side, in part to avoid excessive protest and appeal.

III.2.2. Market Value Assessment

Market value (or capital value) assessment estimates the value that the market places on individual properties. Market value is defined as the price that would be struck between a willing buyer and a willing seller in an arm's length transaction.

The following methods are used to estimate market value:

- The comparable sales approach looks at valid sales of properties that are similar to the property being assessed. It is used when the market is active and similar properties are being sold.
- The depreciated cost approach values the property by estimating the land value as if it were vacant and adding the cost of replacing the buildings and other improvements to that value. The cost approach is used when the property is relatively new, there are no comparable sales, and the improvements are relatively unique. The cost approach is also normally used to assess industrial properties.
- Under the income approach, the assessor estimates the potential gross rental income the property could produce and deducts operating expenditures. The resulting annual net operating income is converted to a capital value using a

capitalization rate. This approach is used mainly for properties with actual rental income.

Market value assessment is used in all the OECD countries studied, as well as number of others including Indonesia, Philippines, South Africa, Latvia, Argentina, and Mexico. A variation of the market value approach is used in the United Kingdom. Under the British council tax, the value of each residential property is assessed and placed on a valuation list in one of eight valuation bands. The value assigned to each property only indicates the valuation band and not the actual value of the property. Any change in value because of a change in house prices generally does not affect the banding. Individual properties could be re-banded only under two circumstances: if the local area changes for the worse, all homes in the area may be placed into a lower band. If a house is expanded it will be re-banded only after it is sold; if a home decreases in value because part of it is demolished, it may be re-banded immediately.¹²

III.2.3. Rental Value Assessment

Under the rental value (or annual value) approach, property is assessed according to estimated (not actual) rental value or net rent. One rationale for using rental value is that taxes are paid from income (a flow) rather than from wealth (a stock) and thus it is appropriate to tax the net rental value of real property. In theory, however, there should be no difference between a tax on market value and a tax on rental value. When a property is put to its highest and best use and is expected to continue to do so, rental value will bear a predictable relationship to market value – the discounted net stream of net rental payments will be approximately equal to market value.

This relationship does not always hold, however. First, gross rents are often used rather than the economically relevant “net” rents that build in an allowance for maintenance expenditures, insurance costs, and other expenses. Second, most countries tend to assess rental value on the basis of current use. There can thus be an important difference between market value and rental value. A property that is under-utilized – that is, currently used for a purpose less productive than other possible uses -- would be assessed much lower under the rental value approach than under the market value approach. From a land use perspective, a tax based on value in highest and best use is more efficient than a tax based on current use because it stimulates use to its highest potential by increasing the cost of holding unused or under-used land (as compared to developed land).

There are some problems with the use of rental value assessment. First, it is difficult to estimate rental value when there is rent control. Controlled or subsidized rents cannot be directly used to assess market rents unless the majority of properties are rent controlled.

¹² By assigning properties to broad categories rather than assigning a taxable value to each one, the council tax achieves simplicity and stability at the price of accuracy. Furthermore, because the council tax uses an estimate of market value at a particular point in time (April 1, 1991) and then freezes assessments for the foreseeable future, it will have the same implications as any out-of-date assessment system: inequities will increase over time.

This has been an important problem in India, as discussed in that case study. Second, because vacant land is not taxable under a tax based on rental value in current use (since there is no current use!), an incentive is created in favour of low return uses over high return uses and to withhold rental properties from the market altogether.¹³ If vacant properties are not taxed, the tax has to be higher on occupied properties to yield the same amount of revenue. These higher taxes further discourage investment.

In terms of the administration of the tax, there are some additional difficulties with using rental value (Netzer, 1966).

First, rental value is difficult to estimate because there is not much information on the annual rent of comparable properties for unique commercial and industrial properties such as steel mills, for example.

Second, it is difficult to calculate net rents because the distribution of expenses between landlords and tenants differs for different properties.

Third, assessors may not have access to rental income information because rental income is not always in the public domain in the same way as are sales prices.

Despite these problems, rental value assessment is used in several countries including, for example, Australia, United Kingdom (for non-residential property), China, India, Thailand, Guinea, and Tunisia. In India, where there are rent controls on older properties, the assessed value is not always related to the market value because it is tied to the controlled rent. Each state has attempted to address the property tax problems associated with rent controls. In some states, “reasonable rent” is defined as the actual rent received or the rent receivable, whichever is higher. Other states have defined “reasonable rent” with respect to certain key variables that contribute to the value such as location, construction, area, age, and nature of use. As noted in the case study on India, in response to such problems, at least two states are moving to a market value system and one to an area-based system.

III.2.4. Area-based vs. Market-based Assessment

Where it is possible to use market value, it is generally regarded as a better tax base. First, the benefits from services are more closely reflected in property values than in the size of the property. For example, properties close to transit systems or parks enjoy higher property values. The benefits from these services are not reflected in the dimensions of the property but rather in the value of the property. Even those services where the benefits may relate more closely to property dimensions (such as sidewalks and street lighting, for example) are related more to front footage than to lot size or building size.

¹³ As noted above, if rental value were based on highest and best use, then vacant land would be taxable; the value would have to be estimated on the basis of other properties. Even if rental value were based on current use, it might be possible to assign a non-zero value to vacant land.

Second, market value has the advantage of capturing the amenities of the neighbourhood, amenities that have often been created by government expenditures and policies. Area-based assessments (particularly unit assessment) are unlikely to capture these amenities because they do not take into account differences in the quality of buildings nor their location. Consider, for example, the taxes paid by two properties of identical size and age but in different locations. Specifically, one is located next to a park; the other is adjacent to a factory. Under an area-based assessment system, both properties would be levied the same property tax. Under a value-based assessment system, the property next to the park would pay higher property taxes. In this example, area-based assessments would not be fair.

Third, area-based assessment results in a relatively greater burden on low-income taxpayers than high-income taxpayers when compared to value-based assessment. The reason is that average household incomes in high-value neighbourhoods are higher than in low-value neighbourhoods. A tax on area taxes all properties that are the same size the same amount, whether they are in high-income or low-income neighbourhoods. Similarly, older houses in a bad state of repair but with a large floor area will pay relatively high taxes.

Furthermore, if a relatively poor neighbourhood becomes richer, there would be no relative tax change. A tax system that fails to take account of changes in relative values over time will result in inequities. If one value per square meter is chosen for all single-family homes, for example, and relative property values change over time as some locations become more desirable over time, then over a period of years if the value per square meter is not changed, inequities in the assessment system will result.

One advantage often attributed to unit value assessment is that property taxes on this basis tend to be less volatile than under market value assessment because they do not change when property values change. As just noted, this “advantage” can equally be argued to be a disadvantage, exacerbating inequities.

It has also been argued that unit value assessment is easier to understand and cheaper to administer than value-based assessments. This is particularly true where the real estate market is not well developed, as in many developing and transition countries. However, although unit value may be easier to administer for single-family residential properties, it is difficult to use for multi-residential rental, residential condominium, commercial, and industrial properties.

- One problem is what to include for tax purposes. For example, there is the question of whether spaces such as atrium floors, servicing shafts, and elevator spaces should be taxed even though they have no revenue-producing space. There are issues about whether to include structural elements (such as decorative beams) that project outside of the glass line, as is the case with some office towers.
- Another problem is how to allocate shared facilities such as common entrances,

halls, exits, aisles, atria or malls, among owners/tenants. For example, common areas can be shared on the basis of the size of each unit relative to the total, the rent charged to each unit, or some other measure.

- A third problem in market economies has been the tendency towards the proliferation of multipliers that are applied to the area of improved property to reflect the relative differences in value. In the Netherlands, for example, the system became so complex that it was abandoned (Youngman and Malme, 1994).

In any case, to the extent zones are defined more narrowly over time, unit value assessment can easily evolve into something very like a market value system. It may well be, for example, that this process or something like it will occur in the numerous transition countries currently employing some variant of area-based assessment as a natural outcome of the information on building and land sizes recorded in the records of the old central planning systems.

III.2.5. Self-Assessment

Self-assessment requires property owners to place an assessed value on their own property. In Hungary, for example, the current local tax system is based on the principle of self-identification. Taxpayers are obliged to register and report their tax obligations to the local tax administration. The verification for the tax on buildings and tax on idle land in Hungary requires verification only of the property size and not its market value. In practice, the responsibility of self-registration is not particularly effective because not all owners comply. Consequently, the number of potential taxpayers or taxable assets is generally unknown. The determination of tax liabilities also requires verification of the self-assessment submitted by the taxpayer. The lack of personnel to make field inspections of each property in Hungary means that verification is inadequate.

The rental value tax on housing in Tunisia is based on the number of square meters. Taxpayers are required to submit a self-declaration form. Some municipalities verify the declared square meters against existing information, for example from the roll for the rental value tax that existed before 1997, but most municipalities do not.

In Thailand, self-declaration of property owners is made to local assessors who assess the self-declared value and identification in terms of how well it matches their data. Self-declaration of properties by landowners is also required in the Philippines, once every three years. The local assessor then prepares the assessment roll.

Where properties are assessed at market value and there is self-assessment, the taxing authority in some countries has the right to buy the property at the assessed value.¹⁴ A system where the taxing authority can buy the property will only be credible if it can and

¹⁴ Taiwan is an example (Youngman and Malme, 1994, p. 12). This idea is an old one, used in Australia in the 19th century, for example, as noted by Bird (1974). It has seldom been effective.

will buy the property; this right has rarely been exercised, however, in part because of the political impossibility of large-scale purchases of residences.

A recent proposal along similar lines is that people should assess their own properties and then make them public (Tanzi, 2001). Anyone who wanted to buy their property at a price that exceeded the declared price, by some margin such as 40 percent, could make an offer. If the owner refused the offer, the bid plus a penalty would become the new assessment. Although appealing to economists and frequently recommended in the past, such ideas on closer examination seem much less attractive on a number of grounds (Holland and Vaughan, 1970) and have not proven acceptable in practice anywhere.¹⁵

Nonetheless, self-assessment is an appealing procedure to poor countries with little administrative capacity. It does not require assessment staff, and it appears to be easy to implement. In some cases, such as Bogota (see the Colombia case study), it has at times appeared to be relatively successful. To minimize the obvious problems of under-statement associated with any self-assessment system, however, the government has to be prepared to obtain expert assessments of individual properties in cases where it believes self-assessment is inaccurate. As is usually the case with taxation, there is, in the end, no easy way to get people to tax themselves in the absence of a credible verification process, and expert assessments of course significantly increase the cost of collecting the tax.

Self-assessment can lead to inaccurate estimates of property values with a tendency toward underestimation. It violates the principle of fairness on the basis of ability to pay because people with comparable properties will not necessarily pay comparable taxes. Generally lower-valued properties have a lower rate of underestimation than do higher-valued properties, making this assessment approach regressive (taxes are relatively higher on low-valued properties). Under-estimation also obviously erodes the size of the tax base with the usual detrimental effects on tax rates and/or on service levels.

III.3. At What Rate?

Tax liability is determined by multiplying the assessed value times the tax rate. Given the size of the tax base, the tax rate determines how much revenue the property tax will generate. Three major issues arise with respect to tax rates. Who sets them? Are they differentiated, and, if so, how? And, finally, how high are they?

III.3.1. Who determines the tax rate?

Tax rates are sometimes determined locally and sometimes by the central government. As shown in Table 7, there are very considerable differences between countries with respect to the extent to which local governments are free to determine tax rates. Sometimes (Japan, Ukraine, Chile, Thailand, Tunisia) rates are essentially set by the central government. Sometimes (Hungary, Colombia, Philippines) there is some local discretion,

¹⁵ For a brief review of the past history of this idea, and the problems with it, see Bird (1985).

within centrally-set limits. Sometimes (Canada, Argentina, Kenya) there is complete local discretion.

Where rates are determined locally, as in Canada, local governments first determine their expenditure requirements. They then subtract non-property tax revenues available (e.g. intergovernmental transfers, user fees, and other revenues) from their expenditure requirements to determine how much they need to raise from property tax revenues. The resulting property tax requirements are divided by the taxable assessment to determine the property tax rate. Even where rates are locally determined, there are often limits placed on them by the central government: for example, in Ontario, Canada, tax rates imposed on non-residential property are effectively “capped” at present in most localities.

If a local government is to make efficient fiscal decisions, it needs to weigh the benefits of the proposed services with the costs of providing them. If local governments do not finance these services themselves, then the link between expenditures and revenues is lost and the choice of services will not be based on their cost. Setting tax rates at the local level places accountability for tax decisions at the local level. Local determination of tax rates is particularly important in the many countries in which (as discussed in III.5) the tax base is determined by a senior level of government.

Local tax rates may have to be set within limits, however, to avoid distortions. A minimum tax rate may be needed to avoid distorting tax competition. For example, richer local governments may choose to lower tax rates to attract business. With their larger tax bases, they can provide equivalent services at lower rates than poorer competing regions. The resulting location shifts may not be allocatively distorting, but they are often politically unwelcome. In addition, a maximum rate may be needed to prevent distorting tax exporting, whereby local governments levy higher tax rates on industries in the belief that the ultimate tax burden will be borne by non-residents (Broadway and Kitchen, 1999, p. 373). Such tax exporting severs the connection between payers and beneficiaries and renders decentralized decision-making about taxing and spending inefficient.

III.3.2 Differentiated Tax Rates

Many local governments levy rates that differ by property class.¹⁶ Different tax rates may be imposed for different classes of property (residential, commercial, and industrial, for example). This system gives local governments the power to manage the distribution of the tax burden across various property classes within their jurisdiction in addition to determining the size of the overall tax burden on taxpayers.

¹⁶ Property tax rates can also vary according to the services received. The case of Tunisia mentioned earlier is one example. More commonly, in some jurisdictions, there is a general tax rate across the city and a special area rate or additional surcharge in those parts of the city that receive services only provided to them e.g. garbage collection, street lighting, transit etc. Special area rates, which are earmarked for services in those locations, approximate a benefit charge.

Generally where such variable tax rates are applied, properties are assessed at a uniform ratio (100 percent or some lesser percentage) of market value. Another and probably more common way to differentiate among property classes is through a classified assessment system, as in the Philippines, for example. Under this system, classifications or types of property are differentiated according to ratios of assessed value but a uniform tax rate is applied. In terms of accountability, variable tax rates would be more visible and easier to understand for taxpayers than a classified assessment system, which may, unfortunately, be one reason that they are less commonly employed than differentiated assessment ratios. Indeed, even when assessment ratios differ substantially among classes of property, the differentiation is more often a matter of practice than of law and requires special study to be determined.

Table 7 shows that in many of the countries studied tax rates are differentiated by property class, or there is assessment differentiation or tax relief for some classes of property. Variable tax rates (or other differentiation of property taxes among property classes) may be justified on a number of grounds:

- On the basis of fairness with respect to benefits-received, it can be argued that the benefits from local public services are different for different property classes. In particular, a case can be made on benefit grounds for taxing non-residential properties at a lower rate than residential properties (Kitchen and Slack, 1993). Few examples of such a differentiation appear to exist, however.
- On efficiency grounds, it has been argued that property taxes should be heavier on those components of the tax base that are least elastic in supply. Since business capital tends to be more mobile than residential capital, efficiency arguments lead to the conclusion that business property should be taxed more lightly than residential property. In reality, however, as discussed further in section III.4, lower rates are generally applied to residential properties.
- Variable tax rates can also be used to distort decisions deliberately to achieve certain land use objectives. Since higher property taxes on buildings tend to slow development and lower taxes speed up development, a municipal policy to develop some neighbourhoods instead of others would appear to require differential taxes in different locations as well as for different property classes.

An additional question about property tax rates is whether the tax is levied at a flat or graduated rate. In many countries, as discussed in the case studies, some graduation is in effect introduced by exempting low-value properties. In a few instances, for example, some provinces in Argentina, the tax rate increases with the value of the taxed property. In Thailand, the tax rate also increases, although in a peculiar way which has the result that the rates end up being actually regressive. Many countries impose higher taxes on “idle lands” -- though seldom with much effect, as discussed further in section III.6 below.

Particularly in rural areas, some countries have occasionally attempted to use progressive land taxes as, in effect, proxy income taxes by attempting first to aggregate all land owned by a single person and then to impose a graduated tax. Such schemes have generally failed, however, owing both to the administrative difficulty of assembling the information – especially when properties are located in different jurisdictions – and especially to the political unreality of attempting to, as it were, accomplish “land reform by stealth” in this way (Bird, 1974).

III. 3.3. The Level of Tax Rates

One of the more striking features of land and property taxation in many developing countries is how very low the tax rates often are. Even in countries, such as Argentina, where progressive rates are imposed, the top rate (on assessed value) seldom exceeds much more than 1 percent, and it is often lower. In Indonesia, for example, the centrally-set land tax rate is only 0.5%. Moreover, as already mentioned in I.1 above, the effective rate of property taxes is, owing to low assessment ratios and poor enforcement, often much lower than the nominal or statutory rate. In the Philippines, for example, where the nominal rate is as high as 2%, the effective rate has been estimated at only 0.07% (Guevara et al., 1994).

Another factor resulting in low effective tax rates in many countries are the lags in reassessment and the inadequacy of adjustment for value changes, discussed in III.5.2 below.

III.4. Some Special Cases

In almost every country, single family owner-occupied residences are favoured, as are farm properties, while non-residential property is subjected to higher taxes. This section discusses these special cases.

III.4.1. Owner-occupied Residences

Many, perhaps most, countries favour single-family residential owner-occupied properties over multi-residential rental properties and commercial and industrial properties. Favourable treatment of single-family residential properties is achieved in three ways.

1. The assessment system deliberately under-assesses single-family residential property compared to apartments, and commercial and industrial property of comparable value. In the United States, as an example, the average effective property tax rate on multi-family residences is, on average, about 40% higher than that on single-family houses.¹⁷
2. Many jurisdictions have legislated lower tax rates on single-family residential

¹⁷ See study cited in note 5 above.

property. In many cases, lower-valued houses are simply exempted.

3. Special property tax relief measures are often provided to residential property owners (and, in some cases, tenants) in the form of tax credits, homeowner grants, or tax deferrals. These measures are not generally available to non-residential properties. This differential treatment does not necessarily reflect the differential use of services by different property types. Single-family owner-occupied residential properties have presumably been favoured largely on political grounds: residential homeowners are much more likely to vote in local elections than are tenants.

III.4.2. Non-residential Property

Non-residential properties include a wide variety of property uses including commercial uses (such as offices, banks, retail outlets, restaurants, hotels), industrial uses (such as mines, manufacturing plants, shipyards), and special uses (such as pipelines and railway rights-of-way).

In most countries, such property is, in law and especially in practice, subject to higher taxes than residential property. There is little justification for the higher taxation of non-residential property. Differentially higher taxation distorts land use decisions favouring residential use over commercial and industrial use. A similar rate on both uses would ensure that the choice is based on the highest and best use (Maurer and Paugam, 2000). Special taxation of one factor of production (real property) may also distort productive efficiency by inducing a different choice of factor mix in producing goods and services.

In addition, as mentioned in section III.3.1 above, the ability of non-residential property owners to export property taxes to residents of other jurisdictions may require limits on the local government's ability to determine tax rates on this class of property. The burden of non-residential property taxes is borne, to an extent depending on market conditions, by the consumers of the products or services produced utilizing such property. To the extent that the product or service is exported outside the jurisdiction, consumers in other jurisdictions may thus bear part of the tax. Tax exporting is inequitable because the same benefits of local expenditures require different tax prices in different jurisdictions depending on the degree of exporting. It distorts development patterns because property taxes paid locally are not related to the benefits received locally. It reduces democratic accountability because those bearing the burden of the tax are not the same as those enjoying the benefits.

Lower taxation of particular areas within or between municipalities in order to attract commercial and industrial development will also distort land use decisions. In terms of inter-metropolitan location decisions, business activity is most influenced by market conditions, the availability and cost of a skilled labour force, the presence of necessary production materials, proximity to markets, and quality of life. If property taxes account for a relatively small proportion of the total costs of a business, any reduction in the tax is unlikely to be large enough to initiate a relocation decision or to encourage significant business activity. Intra-metropolitan location decisions, on the other hand, may be

affected by property tax differentials. Within a large metropolitan area, market conditions and cost variables tend to be reasonably uniform. It follows, then, that lower property taxes in one community will generate lower costs at the margin and higher profits for businesses locating in that particular community. Tax competition among municipalities could lead to lower municipal revenues without any real impact on allocative decisions at the local level (Maurer and Paugam, 2000). One way to minimize such undesirable tax competition is for the central government to set minimum tax limits.

III.4.3. Agricultural Land and Property

As Table 7 shows, in most of the 25 case study countries, agricultural properties tend to be treated favourably under most property tax systems. (As noted in section III.2.2 above, they are also often assessed differently, and probably in a way that ends up treating them favourably.) An interesting exception is the exceptions are the Philippines where, unusually, farm properties are taxed on a higher percentage of market value than residential properties. Rural and especially farm properties may be favoured in a variety of ways, as indicated in Table 7 and discussed in detail in the case studies: lower assessments, exemptions for part or all of the farm property, lower tax rates on farms, or farm tax rebates. In some countries, for example, in the African cases included here, most agricultural land is simply not taxed.

Rather than assessing farms at their market value that reflects the highest and best use, farms are often assessed at their value in current use. What this means is that the value of a farm for tax purposes is determined by its selling price if it were to continue to be used as a farm. Alternative uses of the farm, or its speculative value, are not considered in the determination of value.

In Ontario, Canada, for example, a farm is assessed in its current use. The farm tax rate is set by provincial law at only 25 percent of the residential tax rate established by the local government. Even when land is being used as farmland simply while awaiting development (urbanization), new values are to be phased in over stages, for example, with increases being triggered by when the land is registered for subdivision and when a building permit has been issued.

Such favourable treatment of agricultural land is usually designed to preserve it from conversion to urban use. It has been argued, however, that basing the property tax on value in current use is not sufficient to preserve farmland because the resulting tax differential is unlikely, given the generally low effective tax rates on land, to be large enough to compensate for the much higher prices that would be paid if the land were converted to urban use (Maurer and Paugam, 2000). (This is the inverse of the comment made later in section III.6 about the general ineffectiveness of “idle land” penalty taxes.) Furthermore, favourable treatment of rural land can even increase speculation at the urban fringe and hence end up increasing urban land prices.

There is, of course, a very extensive literature on the theory and practice of agricultural land taxation that has not been discussed in detail here. Bird (1974), for example, argues that refined attempts to impose “efficient” and “equitable” land taxes have generally failed for administrative and political reasons. He concludes that a simple uniform tax on a classified area basis is probably the best form of agricultural land tax for most developing countries. Strasma et al. (1987) reviewed subsequent experience and again found little evidence that countries had made much effective use of land taxes in rural areas. More recently, Skinner (1991) and Hoff (1991) looked in detail at the economics of agricultural land taxation and suggested that the impact of such taxes depended largely upon their effects on uncertainty and on the institutional framework within which production risks are shared. All these authors found that a serious barrier to effective rural land taxation was the high administrative cost of such taxes – a point emphasized also for transition countries by Ott (1999) – thus reinforcing the conclusion cited from Bird (1974). Of course, as noted further in Part V below, the political obstacles to rural land tax reform are also very high in many countries.

III.5. Tax Administration

“Tax administration is tax policy” is a common observation in tax discussions in developing and transitional countries, and in no area of taxation is this saying truer than with respect to property tax, because no area of taxation is more dependent on administration. How well land and property taxes are administered not only impacts on their revenue but also affects their equity and efficiency. In many countries, poor tax administration is an impediment to implementing the property tax. Often, local authorities do not have the capacity to administer the tax. Many administrative functions are performed manually rather than being computerized. The result is that the revenue base does not include all taxable properties, collection rates are low, and enforcement is almost non-existent. Even in countries with relatively good property tax administration, there are often problems updating values on a regular basis.

Three key steps are involved in the process of taxing real property:

1. Identification of the properties being taxed,
2. Preparation of a tax roll (which contains a description of the property and the amount of assessment) and responding to assessment appeals
3. Issuing tax bills, collecting taxes, and dealing with arrears.

We shall discuss each of these in turn.

III.5.1 Property Identification

The first step in levying a property tax is to identify the property and to determine the owner (or other person responsible for tax liability). A fiscal cadastre requires the

following minimal information for each property: a description, a definition of its boundaries (using cadastral maps), ownership, and the value of land and improvements.¹⁸ The preparation of cadastral maps is an essential element of property identification. It is necessary to establish a complete inventory of all properties and to assign a unique property identification number to each parcel to allow for the tracking of all parcels. Property identifiers also allow for the linking of assessment, billing, and property transfer records.

Property identification requires that existing information on properties within the jurisdiction is updated and made consistent. As shown in many of the case studies, at present some of the needed information is held by different agencies, for example, in Latvia by the State Land Service, the Title Book Service, and the State Tax Service. Information that needs to be collected for each property includes, for example: an assessment roll number of the property, the address, the owner(s) of the property, the area in square meters, the age of the unit, and whether it has been renovated.¹⁹ The information collected has to be reported in a consistent way and a process needs to be established to update it on an annual basis (Slack et al., 1998).

The process of property identification is often more difficult in developing countries and transitional economies. Some of the problems cited in the case studies include:

- Revenue base information is neither up to date nor complete. In Kenya, for example, the fiscal cadastre and valuation rolls include only between 20 and 70 percent of the total taxable land; in Guinea, the tax roll in 1999 covered only about one third of taxable property.
- The information to support a fiscal cadastre on a consistent nation-wide basis is often fragmented between the central and local governments. In Hungary, for example, the Land Offices of the Ministry of Agriculture manage the legal cadastre but have no information on property values. The Duty Offices at the local level keep transactions records. Tax departments within local governments keep information on residential units. Technical departments within local governments maintain information on building permits, local master plans for land use zoning and information on public utility infrastructure. These databases are not integrated.
- The system for monitoring and recording land transfers is often lacking. In the Philippines, for example, the law requires the Register of Deeds,

¹⁸ We do not discuss cadastres in detail here. For a useful (though out-of-date) review, see Dale (1964). A useful review of the entire property tax administration process is United Nations (1968). A more up-to-date review is Keith (1993).

¹⁹ The cost of collecting the information could be added to the tax bill. In some Canadian provinces, for example, the assessment function is performed by a corporation representing municipalities in the province. The cost of the assessment function is passed on to municipalities who add this cost onto property tax bills.

Notaries Public, and Building Officials to submit documents on property transfers to the assessors, but in practice the latter generally rely on taxpayers for this information. As is not uncommon in developing countries, it is easier to get (unreliable) information from taxpayers than (probably not much more reliable) information from other agencies.

- Because it is too expensive for the local governments to keep a good record of property identification data in Thailand, taxes are simply not collected on all properties within each jurisdiction.
- In many countries, property records are not computerized. In Kenya, for example, property records are kept manually and maintained in an ad hoc manner.

III.5.2 Assessment and Appeals

For the costs of local government to be shared fairly among taxpayers, property taxes have to be based on assessments that are uniform within each jurisdiction. Uniform assessments may be easier to achieve where the assessment function is centralized. One study, for example, found that the use of county rather than local assessors resulted in more uniform residential assessments in U.S. jurisdictions (Strauss and Sullivan, 1998). Another study suggests that, to the extent that there are economies of scale in the assessment function, these are more likely to be achieved at the central (state) government level (Sjoquist and Walker, 1999). Of course, one way to achieve economies of scale while maintaining local assessment might be by contracting out the assessment function (Bell, 1999).

Table 8 shows the level of government responsible for the assessment function in each of the 25 countries. The assessment function seems to be essentially local in about half the cases and central or regional in the others. In many cases, however, the detailed assessment methodology is established by the central government even when assessment is a local function.

Fair and productive property taxes require not only a good initial assessment but also periodic revaluation to reflect changes in value. Frequent valuations maintain the legitimacy of the tax and reduce the risk of sudden, dramatic shifts in tax burdens from large increases in assessed values. For these reasons, the valuation cycle needs to be fairly short.

In a value-based system where property values are changing, a shorter time frame for reassessments would obviously be better at reflecting current market conditions. Indexing (e.g. by the rate of inflation) as used in some countries, for example Colombia in the past, is not as good as reassessment because property values change at a different rate in different neighbourhoods and for different property characteristics. Fairness is not achieved when property assessments are merely increased by a common factor on an

annual basis. Nonetheless, where financial resources are insufficient to do regular reassessments, indexing may be useful. Indexing (over a three to five year period) that reflects relative price changes among locations and property markets can both ameliorate taxpayers' discomfort with large assessment changes and improve information about market trends for assessment administrators.

Table 8 shows great diversity across countries with respect to the frequency of reassessment ranging from annual to infrequent, but generally within the range of three to ten years. It should be noted, of course, that the time periods mentioned in the table are those specified in the law. In many instances, as discussed in the case studies, the pace of revaluation in the real world has been considerably more dilatory.

As with property identification, the problems encountered with assessment and reassessment often stem from lack of resources and expertise. In Hungary, for example, assessors are not knowledgeable about the technical issues involved in making sales comparisons for estimating market value. In the Philippines, assessment suffers from a lack of technically qualified staff and assessment tools. The same may be said of many other developing and transition countries.

Another problem with keeping assessments up to date in many countries relates back to the lack of integration between different government agencies mentioned in section III.5.1 above. If, for example, a property is sold, and the information is recorded in the notarial office or land registry, notification should be sent to the fiscal cadastral system of the new recorded sales value. If a building permit is issued, or a property is sub-divided, again the recording office should send notification to the office responsible for maintaining the property tax roll. Such processes do not work well, or at all, in many countries.

Any property tax system also needs a process by which taxpayers have an opportunity to appeal their assessment if they think it is wrong. Generally, the appeals process includes an informal review by the valuation office to correct factual errors and differences in views of the assessed value. If differences are not resolved at this stage, they proceed to a valuation review board comprising experts in valuation. In some countries, there is a third stage whereby taxpayers can appeal the decision of the valuation review board to a specialized tax court. This latter stage may require legal representation. Table 8 summarizes the assessment appeal mechanisms in the 25 countries covered in this study.

One comment that may perhaps be made about appeal systems is that, although both desirable and necessary in practice, they may sometimes result in increasing the inequity of property taxes in practice because they are invariably most utilized by better-off taxpayers, who both have more to gain and can better afford to pursue legal redress. In many countries, however, as noted in some of the case studies, the reality is that that there may be an appeal system in law but that in practice it seems almost never to be utilized – perhaps because the taxes imposed are so small that appealing them is not worth the while of those most likely to do so, perhaps because the same people may have

other, less formal, ways of seeking relief (corruption), or perhaps because the formal system may be so cumbersome and difficult to use that it is not worth pursuing.

III.5.3 Tax Collection and Arrears

Tax collection involves sending out tax bills, collecting the taxes, and ensuring payment. Table 9 shows that tax collection is usually, but not always, a local government function. In terms of the formula set out in section II.1 above, at the very least local governments thus almost always have some discretion in determining the size of the last ratio mentioned there – the ratio of taxes collected to taxes assessed. In a few instances, however, such as Guinea and Tunisia (and likely most of francophone Africa) as well as Chile, they cannot even do this.

If the property tax is not paid within a specified time period after the due date, then interest and a late fee are generally charged. In cases of long-term delinquency, other enforcement measures are usually taken eventually leading to the sale of the property to satisfy the tax obligation. In most countries, property transfers are not permitted unless property taxes are paid.

Tax arrears reduce the revenues generated from the property tax. Table 9 shows the extent of tax arrears for those countries for which the information was available. Although tax arrears as a proportion of taxes collectible are low in most developed countries (for example, 3 to 4 percent in Japan and the U.K), they can be very large in some developing and transitional countries (for example, 50 percent in parts of Kenya and the Philippines and almost 70% for land tax in Russia). Tax arrears tend to be higher in countries that do not have sufficient resources or expertise to administer the property tax and where enforcement is weak.

III. 6. Other Taxes on Land

The preceding discussion, like the accompanying case studies, is focused essentially on direct taxes on land and property, and in particular on local property taxes. For the most part, the case studies, and this paper, focus on land and property taxes as such. There are, of course, many other taxes that to some extent fall on land – transfer taxes, stamp taxes, capital gains taxes, value-added taxes, inheritance taxes – and as Table 10 and, in more detail, the case studies in the annex show many countries do indeed have other forms of taxation on land.

While it is beyond the scope of this report to go into details and no attempt has been made to cover such levies thoroughly in this report, a few general observations may perhaps be made.

First, perhaps the most common alternative form of land tax is one on land transfers. In fact, land transfers may sometimes be subject to various taxes and charges – land transfer taxes, stamp duties, notarial fees, registry charges, value-added taxes, and, in some

instances, succession and gift taxes. While it is beyond our scope to discuss either the VAT or death taxes here, in view of their popularity it perhaps deserves emphasis, as David Ricardo pointed out two centuries ago, that taxes on the transfer of property are the ultimate “anti-market” tax.

Such taxes discourage the development and formalization of land markets.²⁰ Their existence, often at surprisingly high rates, in a number of countries is presumably attributable primarily to administrative arguments since the “taxable event” – the recorded exchange of title – is visible, even if the true value of the transaction usually is not. Any country at all concerned with efficient land use in which land transfer taxes in any form are imposed at high rates would be well advised to consider lowering such taxes and making up any immediate revenue loss by, for instance, strengthening basic property taxes.

Many of the other “non-basic” taxes on land and property noted in Table 10 represent attempts to use land taxation for essentially non-fiscal purposes – to reap “unearned increments” (*plusvalia* in Colombia), to recoup the costs of public investment expenditures (development charges in Canada, special assessments and betterment levies in various countries), or to discourage the holding of “idle land” (Philippines and penalty rates in some Latin American countries).

Such non-fiscal objectives of land taxation have received much attention over the years, but seem in practice to have come to little in any country. One important point that is not usually noted clearly enough is that there are two dimensions to the non-fiscal impact of land and property taxes.

First, and in many ways most important, such effects exist, and ought therefore to be taken explicitly into account in designing and evaluating property tax systems. Advocates of land value taxation, for example, argue that taxing land alone is more favorable to investment and growth than taxing land and improvements (Netzer, 1998). The uneven way in which property taxes are often applied in within urban areas – with differential taxes on housing and business, for example, and different impacts in older and newer areas – may affect the pattern of urban growth (Oldman et al., 1967; Slack, 2002). Rural development patterns too may be much affected by land taxation (Bird, 1974). Sensible fiscal (and land) planning must certainly take such effects into account, and in some instances, as noted further in Part V below, adjust the design of taxes accordingly.

Secondly, however, the temptation to attempt to use land taxes explicitly to achieve desired non-fiscal outcomes seems impossible to resist. From Britain to Colombia, from the Philippines to Tunisia, instances of tax design intended primarily to achieve such objectives are easy to find, as illustrated in some of the case studies. What is not at all easy to find, however, is much evidence that such tax gadgets produce beneficial results. Indeed, some have argued (Bird, 1974) that in reality the time and effort devoted to

²⁰ For an analysis of such “market-discouraging” transfer taxes, and references to the literature, see Bird (1967).

designing land taxes intended primarily to achieve non-fiscal purposes has detracted from the more important task of implementing an effective and efficient revenue source for local governments. Land reform, the control of urban land speculation, reaping for public use land value increments may all be worthy objectives, but attempting to achieve them indirectly through the clever design of fiscal instruments appears to have been counterproductive.

The *plusvalia* or land value increment tax found in a number of Latin American countries, for example (Smolka and Furtado, 2001) is no doubt a good idea in principle. But no one, anywhere, has been able to get very far with this approach in practice (witness the account in Hood (1977) of Britain's futile attempts to tax land value increments). Similarly, attempts to adjust rural land taxation to, as it were, achieve land reform by stealth, as has frequently been proposed in India, for example – where the issue is especially salient because of the unfortunate constitutional exclusion of agricultural income from the central income tax -- seem doomed. As Hirschman (1967) and Bird (1974) long ago noted, what cannot be done openly for political reasons can seldom be accomplished in an indirect manner either, not least when it is adverse to the perceived interests of the landowning elite.

In the end, the only “non-basic” property tax that really seems worth exploring in most countries is some form of special assessment or betterment tax. Countries such as Colombia have in the past, and still sometimes today, had considerable success in recouping some of the benefits to adjacent property owners from certain public investments through such means. As has been noted by various authors, however, it is not an easy or costless procedure to establish and operate such a system in the conditions of a developing country (Rhoads and Bird, 1970; Doebele and Grimes, 1978), and few other countries seem to have managed to do much with this fiscal instrument. Similarly, although development charges, exactions, and other forms of “value capture” have been increasingly employed in some U.S. states and Canadian provinces, and some useful lessons for other countries may perhaps be learned from this experience, it seems likely that the role of such devices is also likely to be very limited in the circumstances of most developing and transition countries (Slack, 2002).

Part IV. Lessons from Experience with Property Tax Reform

Over the last few years, a number of countries have implemented, or attempted to implement, property tax reform. The nature and extent of reform has of course been different in different countries depending on the need for reform and the context in which the reform took place. For example, some countries have made changes to the tax base and tax rates; others have focused reform efforts on improvements to the administration of the tax. This section briefly reviews recent experience with tax reform in six countries: Canada, United Kingdom, Hungary, Colombia, Indonesia, and Kenya. Under each heading, we shall first present a brief summary, followed by a summary of country experience.

IV.1 Reasons for Reform

The reasons for undertaking property tax reform vary among the six case studies. In some countries, property tax reform was part of an overall reform of local government structure and finance. In other countries, it was part of a reform of the overall tax system. In still other countries, property tax reform has been carried out on its own, without being part of other government initiatives.

The main stated reasons for reform have been (1) to simplify the tax system, (2) to raise more revenues from property taxes, and (3) to remove inequities in the tax system. In almost all cases, particular attention was paid to the reform of the assessment system, either because it was seriously out of date or because there was a desire to move to a value-based system. As Dillinger (1991) and Kelly (2000) have stressed, however, not only is it not enough to reform assessments, but concentrating on assessment reform may in the end subvert the entire reform effort. We shall discuss this point further in Part V below.

The property tax reform in Ontario, Canada was introduced in 1998 following thirty years of commissions and reports on the need for reform. The main justification for reform was that the seriously out-of-date assessment system had resulted in inequities within and between property classes and across municipalities. These issues had been discussed for years but the situation became urgent when successful appeals of the assessment base increased dramatically in the early 1990s, resulting in a serious erosion of the property tax base. At the same time, a new provincial government was engaged in major reforms of local government such as municipal restructuring and a realignment of services between local governments and the provincial government. Property tax reform was part of an overall reform of local government finance.

In the United Kingdom, property rates were levied on the basis of rental value until 1990. The potential impact of a revaluation from 1973 values to more current values was expected to result in significant (and politically undesirable) shifts among property taxpayers. To avoid the anticipated opposition to a reassessment, the residential property tax was replaced by a poll tax (community charge) in 1990. The poll tax, however, was extremely unpopular. It was felt to be regressive and too expensive to collect, and collection rates were low. The unpopularity of the tax (and the unpopularity of the government that introduced it) combined with low collection rates led to the abolition of the poll tax in 1992 and its replacement with a residential property tax (the council tax).

Hungary has not yet had a basic reform but a proposal to implement an *ad valorem* property tax was drafted as an amendment to the Law on Local Taxes by the Ministry of Finance in 1996. Although the proposal was not presented to Parliament, it was tested on a sample of municipalities. The basic reason for the proposed reform was to obtain a sustainable revenue source for local governments in the face of declining central government transfers and reduced revenues from privatization.

In Colombia, following an earlier reform in 1983, another major reform of the property tax regime was made in 1990. This reform was intended mainly to simplify the administration of taxes on land and to raise more revenue from the property tax.

The Indonesian property tax reform began in 1986 and was an integral part of a comprehensive tax reform to simplify the tax code, broaden the tax base, minimize inequities, and increase the efficiency and effectiveness of the tax system to generate government revenues. Prior to the reform, the property tax was a complex system with seven different land-based tax laws. Each tax had a slightly different tax base and tax rates varied. These taxes were administered by different agencies and by different levels of government. Property tax collections were low and arrears were high. Most property tax information was out of date. Assessed values were much lower than market values and were inconsistent among properties.

In Kenya, property tax reform was part of an overall strategy to reform local government through the Kenya Local Government Reform Programme in 1998. The reform included rationalizing the central-local relationship, enhancing local financial management and revenue mobilization, and improving local service delivery through greater citizen participation. One of the key local government objectives was to establish a sustainable local revenue mobilization capacity to generate the needed own-source revenues in order, (along with other local government reforms) to improve local service delivery, enhance economic governance, and alleviate poverty.

IV.2 Nature of Reform

To a large extent, in every case the reform (or, to include Hungary, the proposed reform) of property taxes in the six case studies has focused on changes to the assessment base. In some cases, there was a move to market value; in other cases, there were administrative reforms to improve the way in which properties are assessed with a view to achieving uniformity in assessment. Improvements to collection and enforcement have also been an essential part of the reform package in some countries.

Property tax reform in Ontario, Canada included both assessment and tax policy changes. A uniform assessment base province-wide was implemented, based on market value. On the tax policy side, municipalities are now permitted to levy different tax rates for different classes of property but they are constrained by provincial ranges of fairness. Municipalities can move towards the ranges of fairness but not away from them. The provincial government also legislated phase-in provisions and tax deferrals to address shifts that would occur within property classes. Even with the initial tax policy reforms and phase-ins, there were large shifts in tax burdens. Further legislation therefore introduced “capping” of property tax increases on multi-residential, commercial and industrial properties.

In the United Kingdom, the poll tax was replaced by a property tax on residential property. Although the base for the earlier property tax (prior to the poll tax) was rental

value, the base for the council tax is market value. Each property is assigned to one of eight valuation bands. There is no individual valuation. The idea behind banding is to determine the relative values of properties within a particular area at a particular time. Any subsequent changes are not taken into account in the banding. The tax rate differs for each band with higher rates applying properties in higher bands.

The draft bill in Hungary defines a range of average unit values for eleven types of residential and commercial property for four types of local governments. Local governments would specify the unit value for the urban zones within the area of a municipality. There are seventeen pre-determined factors with a given multiplier that can be used to modify the sub-averages (e.g. age, utilities, building materials etc.). Minimum and maximum tax rates (0.5 percent and 1.5 percent, respectively) are defined in the draft law. The proposal combines an assessment role for both the central and local governments: the central government would define the calculation method through the relative values of different types of property within a class; local governments would define the base or starting point value based on current real property prices. Each property would have a unique value. Frequent reassessments would be required.

Property tax reform in Colombia involved the amalgamation of four taxes (the property tax, park and forest tax, tax on socio-economic strata, and surcharge on the formation of the cadastre) into one unified property tax. Municipalities were permitted, if they wished, to introduce self-assessment (*autoavaluo*) as the tax base. Tax rates were increased to 1.6 percent of the base for land for purposes other than simple possession of the property and 3.3 percent for property not used for the performance of an economic activity.

The Indonesian property tax reform began with the enactment of the Land and Building Tax Law. This law replaced seven different property-related taxes with a single flat tax of 0.5 percent on the market value of land and improvements. It eliminated both a previous concession to residential property and progressive rates for rural land, and it introduced variable assessment ratios, ranging from 20 to 100 percent. The new law broadened the tax base by curtailing exemptions. It also moved from rental value to capital value. It introduced a valuation deduction on the building for all properties, thus in effect exempting most rural housing and low value urban structures and making the property tax essentially a land tax in rural and low value urban areas. On the administrative side, strict deadlines and penalties were introduced to ensure timely and accurate property registration and tax payment. The banking sector was assigned responsibility for tax receiving and accounting components of the collection system. The law stipulated a new division of property taxes among the various levels of government. Further changes in 1994 saw the property valuation deduction extended to land and building value and the assessment ratio changed to 20 percent or 40 percent depending on the value of the property.

Property tax reform in Kenya focused on tax administration, especially collection and enforcement. The reform was designed to improve the basic management of the property tax system. The property tax management system was part of a new Integrated Financial Management System introduced for local governments. The reform was tested in four

local authorities. Two pilot projects were conducted to test a simple and cost-effective field methodology for collecting property information required to extend the tax base, ensure more complete coverage, and develop a computer-assisted mass appraisal (CAMA) valuation model.

IV.3 Preconditions for Reform

These case studies demonstrate that, in order to implement property tax reform successfully, some basic elements need to be in place. The preconditions for reform depend, to some extent, on the type of reform that is being implemented. If the reform focuses on the assessment base, for example, a precondition for the successful implementation of that reform is the availability of technical expertise. Other preconditions for property tax reform include the existence of a cadastre, a land registration system, the capacity of local government, and a solid administrative infrastructure. If the reform is expected to result in major tax shifts within or among property classes, some form of phase-in mechanism is almost invariably necessary to cushion the impact. In this as in other areas of fiscal reform, failure to allow adequately for transitional problems and to cushion burden shifts is generally a fatal defect. And, of course, as for other reforms, political will is needed to ensure that the reform is implemented.

In the case of property tax reform in Ontario, Canada, political will was definitely an essential element. Successive governments over a thirty-year period did not have the political will to implement reform in the face of significant taxpayer resistance. Other preconditions for reform included the introduction of tax relief programs such as phase-ins, deferrals for seniors, and capping of tax increases for some property classes. Taxpayer confidence in assessed values and the process used to derive them was also essential to the successful implementation of property tax reform.

Tax reform has not yet been implemented in Hungary. If it were, it would benefit from a centralized assessment system that would enjoy economies of scale and be less vulnerable to local political pressure than the current system. If the property tax is to become mandatory (currently it is optional for local governments), some form of tax relief would likely be needed. Among the impediments to the implementation of a market value property tax is the lack of capacity to administer the tax at the local level. Some of these problems stem from gaps in legislation and some from lack of experience with property taxation. Municipalities do not have enough expertise to appraise the value of all properties in their districts. Furthermore, the legislation does not provide much help on what is meant by terms such as “market value” or “comparative sales.” The information to support a fiscal cadastre or mass appraisal on a consistent nation-wide basis is fragmented between two levels of government and often not shared. Information is often not computerized and older information is incomplete and not readily available.

The major precondition for the successful property tax reform in Indonesia was political will. There was also an established property tax culture among taxpayers and the tax

administration that had to be changed to make reform possible. It was thus necessary to rationalize tax administration procedures considerably in order to improve taxpayer service, to reduce compliance and administrative costs, to improve equity, and, ultimately, to enhance revenue mobilization. Administrative changes were introduced on a pilot basis to allow the government to field test procedures, economize on scarce staff and gauge reactions to the new procedures. All methods, procedures, and technology were developed to match the available institutional capacity to facilitate implementation. Several tertiary educational institutions now train about 600 property tax administrators annually. An accurate legal cadastre was not necessary for the property tax reform since the property tax system relies on its own separate fiscal cadastre.

In Kenya, the primary obstacle to implementing property tax reform has been lack of political will and weak administration. Education and incentives are needed for those involved in the revenue mobilization effort. Taxpayers need to receive improved local services and perceive that taxes are being administered fairly. The latter requires the development and implementation of an improved tax administration including property identification and management, valuation and assessment, billing and collection, enforcement, and taxpayer service.

IV.4. Impact of Reform

Unsurprisingly, the impact of the property tax reforms sketched above has been different in different countries, depending upon both the environment and the goal and stage of the reform. In some of the case studies, it is difficult to evaluate the impact of reform. In Hungary, for example, reform has not yet been introduced; in Kenya, new policies and procedures have only been in place for three years. In the other case studies, efforts to introduce market value assessment have had mixed results.

In Ontario, Canada, property tax reform has resulted in improved equity within the residential property class but not much change in equity, either between property classes or within the non-residential property classes. Capping of tax increases for the multi-residential, commercial and industrial property classes has perpetuated the inequities in the tax system. The tax system is much more complex than it has ever been and involves much greater provincial government control over the setting of tax rates among property classes than in the past. The result has been to reform the tax system in a way that provides tax stability, but at the expense of equity and simplicity.

Tax reform in the United Kingdom also focused on stability, again in all likelihood at the expense of equity. Although properties were assessed at their market value as of 1991 and placed in valuation bands, these values have not changed subsequently. Because the council tax uses an estimate of market value at a point in time and froze it for the foreseeable future, its implications are the same as any out-of-date assessment system: inequities increase over time. Government reviews of the council tax suggest that it has been widely accepted by taxpayers because it is well understood, predictable, and stable.

The government is considering introducing a fixed revaluation cycle such as every six, eight, or ten year to improve the fairness of the tax, however.

Property tax reform in Colombia has resulted in an increase in the value of the tax base and an increase in revenues derived from the property tax. Furthermore, the cadastre registry has been updated. By allowing taxpayers to use self-assessment as the basis for income and capital gains tax purposes, property values in Bogota were brought more closely in line with market values, at least initially, although it now appears that this effect is diminishing.

Property tax reform in Indonesia has resulted in increased revenues. The policy and administrative framework have resulted in simplicity, equity and ease of administration. At the same time that revenues have increased, administrative and compliance costs have decreased. Taxpayer and bureaucratic resistance have been minimized. The next step is to give local governments some discretion over rate setting to increase local accountability and control over the amount of property taxes collected.

Most of the countries studied in this report use value-based property taxes or are moving towards using value-based property taxes. Because one of the problems with value-based taxes is volatility, the reform of these taxes has often focused on maintaining stability. In Ontario, Canada, for example, properties were classified into several categories to reduce the impact on those classes that would face large increases and a further tax freeze was imposed on increases in multi-residential, commercial, and industrial taxes. In the UK, residential properties were placed in valuation bands when the tax was introduced and not changed subsequently. Although taxes were not frozen, assessments were. Proposition 13 in California (not studied in this report) substituted time of sale reassessment (market values are only increased at time of sale) for market value and allows a tax increase of no more than a 2 percent annual inflation adjustment.

Classification of properties is often used to cushion the impact on specific property classes, generally favouring residential properties than non-residential properties. There are several problems with classification (Youngman, 1999). For example, a classified property tax can distort land use decisions in favour of those property classes with lower taxes. To the extent that non-residential properties are over-taxed, there are implications for tax exporting and the accountability and transparency of local government (see discussion in Part II above). There is invariably pressure to increase the number of classes and increase the complexity of the tax system. Although classification can reduce the threat that homeowners will not be able to pay their taxes by lowering the tax on the residential property class, it favours both high-income and low-income taxpayers. A property tax credit or circuit-breaker program which is a function of the income of the homeowner (or tenant) would be a more appropriate way to assist low-income property taxpayers (Bird and Slack, 1978).

Property tax freezes address tax volatility by breaking the link between market values and assessments. In the Canadian case, for example, property taxes for some property classes are based on taxes in the previous year. In the UK case, assessments were frozen. The

result of a freeze is that taxes are less uniform and more arbitrary. It also has efficiency and equity implications. Furthermore, as Youngman (1999, p. 1395) notes, it is very difficult to remove a freeze: “once a freeze is imposed, the process of thawing may be too painful to bear.” She suggests other ways to address volatility such as reducing tax rates when assessed values increase; payment alternatives such as frequent instalments and/or payment by credit cards or debit cards, and tax deferrals.

Part V. Conclusions

Tax reform is as much or more a political as it is a technical exercise. The inherent characteristics of land and property taxes discussed in section II.2 above make this dictum especially applicable with respect to property tax reform. Moreover, as was also pointed out in earlier discussion, setting up and administering a decent property tax is a complex and expensive effort. As shown in Part IV above, property tax reform has, of course, addressed different issues in different countries. In some cases, the reform was designed to collect more revenues by changing the tax base or improving collection and enforcement. In other cases, the goal was to simplify the tax system by combining several taxes or by improving tax administration. In other cases, it was to improve the fairness of the tax system by introducing a uniform assessment system.

To implement property tax reform successfully requires a number of preconditions. One of the most important preconditions is the existence of a strong tax administration, including a process for property identification, assessment, collection, and enforcement. As noted earlier, the visibility of the property tax and the inherent subjectivity of determining its base makes it extremely vulnerable to criticism if it is not well administered – and often even if it is.

This is especially important since another critical element in the successful implementation of property tax reform is support from taxpayers. Such support is more likely if taxpayers both feel that they are receiving adequate services for the property taxes that they pay and if they perceive that the process of taxing property is fair and accountable. Unfortunately, local government in general and property tax systems in particular in many countries have a long way to go before these preconditions are likely to be satisfied.

Indeed, if the major interest is in developing a good property tax as a source of revenues, rather than a good local property tax as part of a serious decentralization effort, developing and transition countries might perhaps be better advised to follow the paths of two of the more successful property taxing countries, Chile and Latvia, and opt for an essentially centralized property tax on administrative grounds.

Efforts to reform the property tax have met with mixed success in different countries. Some countries have been successful in simplifying the property tax. Others have sacrificed simplicity to achieve other objectives such as stability. Some countries have

been successful in increasing revenues from the property tax by increasing the size of the tax base, by raising tax rates, by improving tax administration, or by some combination of the foregoing.

Increasing the fairness of the tax has not always been a stated objective of reform, and, even where it has been it has sometimes proved an elusive goal. Moving to a fairer system can be difficult because it invariably means shifts in taxes among taxpayers. The longer reform is delayed, the bigger the shifts that are likely, and the more likely that reactions will be strong with the result that further changes will be made to reduce changes (and hence, in all likelihood, fairness). Even if reform improves the equity, efficiency, and ease of administration of the tax, there are invariably winners and losers. Those who benefit from reform tend to remain silent but those who lose tend to be vocal. With a visible tax such as the property tax, increasing the property tax on some taxpayers (particularly residential homeowners) is very hard to do.

The politics of successful property tax reform thus are not propitious in most countries. Such reform is seldom easy, usually difficult technically, and often not too rewarding in either revenue or political terms. In the circumstances, it is actually somewhat encouraging to see that some countries have in fact been able to achieve success to a considerable extent in this difficult task.

V. 1. Financing Local Governments

The property tax generates a significant proportion of local government revenues in a few countries, mainly in the OECD (see Tables 1 and 5). In most developing and transition countries, however, the property tax yield provides only a small, though not insignificant, share of the revenue available for local governments.

Property tax revenues are low in many developing and transitional economies in part because of the way in which the tax is administered. The coverage of the tax is not comprehensive, assessments are low, as are nominal tax rates, and collection rates are also often low. Low tax rates are sometimes imposed by higher-level governments and sometimes by local governments themselves, which find rate increases in this most visible of taxes very difficult to sell politically.

Simply raising the legal tax rate would seldom be considered appropriate, however, because it would place the burden of the increase on “those few individuals whose properties are on the tax rolls, accurately valued, and from whom taxes are actually collected” (Dillinger, 1991, p.5). Increased nominal rates are likely to be acceptable only along with improvements in tax administration such as more comprehensive coverage, better assessments, more frequent assessment re-valuations, and enforced penalties for late payment.

In general, revenues would be higher if the property tax were based on the value of land and buildings (instead of just on land), if there were few exemptions, if there were no

favourable treatment of particular property classes, if the nominal tax rate were set higher, and if the scope for local tax competition were limited.

Despite its problems, as de Cesare (2002, p.9) recently said, “...the property tax remains the predominant option for raising revenues at the local government level in Latin America” and, it might be added, elsewhere as well. The potential yield of land and property taxes is unlikely to be huge, revenues from this source will not be very elastic, and administrative costs are substantial. Nonetheless, an expanded property tax is indeed both a logical and a desirable objective for many countries, particularly those in which local governments are expected to play an increasing role in allocating public sector resources. But significant additional revenues from this source can seldom be expected in the short run, and, although property taxes are often relatively more important in smaller communities, most additional revenues will likely be found in, and accrue to, the larger urban areas.

V.2. Impact on Land Use

The instruments used by local governments to raise revenues can have an impact on the nature, location, and density of development. Local governments can affect urban form not only with planning tools but also with municipal financial tools. In some cases, municipal financial tools work together with planning tools, but in other cases they may have the opposite effect (Slack, 2002).

The property tax is one fiscal instrument that can clearly influence land use patterns, especially in urban areas. In terms of the impact on the density of development, for example, increases in property tax should be expected to result in a reduction in density (other things being equal). Where the tax is levied on the assessed value of property (land and improvements), any investment that increases the value of the property (such as any improvement to the property including an increase in the density) will increase the assessed value and make the property subject to a higher tax.²¹ Higher property taxes thus provide an incentive for less densely developed projects – for example, scattered single-family houses rather than apartment buildings. On the other hand, as noted earlier, however, a tax on land only will provide an incentive for greater density. The choice of highest and best use as the tax base (rather than current use) is also likely to result in higher densities.

It is important to emphasize, however, that to the extent that property tax differentials are matched by differentials in expenditures on public services, they should not result in a distortionary impact on location or land use. Although the property tax cannot be regarded as a direct “user fee” through which individuals pay directly for the services they receive, where both tax rates and service levels are determined locally, it can often be thought of loosely as a benefits tax to the extent that public services provided to the property owner enhance the value of the property and result in higher property taxes. Where such “matching” does not occur, however, there will be a pattern of positive and negative

²¹ This assumes that an increase in the value of the property will be reflected in the value assessed for taxation purposes, which is of course not always the case.

subsidies which will influence urban development patterns, usually in a way that worsens it. Many years ago, Thompson (1960) wrote a paper called “The City as a Distorted Price System”: unfortunately, most existing property taxes add to, rather than, remedy the resource misallocation with which he was concerned. As Oldman et al. (1967) argued some years ago in the context of an analysis of Mexico City’s finances, such misallocations are potentially much more damaging in the case of the rapidly urbanizing cities of the developing world. These concerns seem still valid today.

In reality, for example, taxes on land and property are seldom matched by service benefits, as was noted earlier. For example, non-residential properties are often over-taxed relative to benefits received compared to residential properties; tax competition among municipalities often does not reflect differential service benefits; and favourable tax treatment of farm properties can create distortions.

In summary, a number of policy choices can be made with respect to the structure of the property tax that will have an impact on land use. Such choices include what is included and excluded from the tax base, how property value is defined for different classes of property (for example, residential, farm, commercial, and industrial properties), what percentage of the value is taxable, and how effective tax rates vary within and between classes of property. Unfortunately, the information on many of these aspects available in most countries is inadequate to permit analysis of the effects of the existing – almost certainly non-optimal – tax systems on land use. Given the very low effective tax rates currently applied in most countries, the resulting distortions may not be too high. Nonetheless, given current pressures for further decentralization in many countries and the likely result, over time, of increased land and property taxation as a source of local finance, it is important to ensure that any future property tax reforms take into account not only the need to be politically acceptable and administratively feasible but also that the increased taxes be designed properly from an economic perspective. As noted in section I.2 above, this is unlikely to mean that “gadgets” such as land value increment taxes and progressive land taxes, with their high and perhaps insuperable political and administrative costs, should play a role. Instead, what it likely means is more attention to developing simple, uniform local property taxes, with the only differentiation being perhaps somewhat heavier taxation of land than of improvements.

References

Robert V. Andelson, ed., *Land-Value Taxation Around the World* (3rd ed.; Malden, MA: Blackwell, 2000).

Roy Bahl, "Land Taxes versus Property Taxes in Developing and Transition Countries," in Netzer (1998).

Roy Bahl, "Property Taxes in Developing Countries: An Assessment in 2001," Lincoln Lecture, Lincoln Institute of Land Policy, Cambridge, MA, October 23, 2001.

Roy Bahl, "The Property Tax in Developing Countries; Where are we in 2002?" *Land Lines* (Lincoln Institute), 2002.

Roy Bahl and Johannes F. Linn, *Urban Public Finance in Developing Countries* (New York: Oxford University Press, 1992).

Michael E. Bell, "An Optimal Property Tax: Concepts and Practices," World Bank Institute, Washington, 1999.

Richard M. Bird, "Stamp Tax Reform in Colombia," *Bulletin for International Fiscal Documentation*, 21 (June 1967), 247-55.

Richard M. Bird, "Assessing Tax Performance in Developing Countries: A Critical Review of the Literature," *Finanzarchiv*, 34 (No. 2, 1976), 244-65.

Richard M. Bird, *Taxing Agricultural Land in Developing Countries* (Cambridge, MA: Harvard University Press, 1974).

Richard M. Bird, "Put Up or Shut Up: Self Assessment and Asymmetric Information," *Journal of Policy Analysis and Management*, 3 (Summer 1984), 618-20.

Richard M. Bird, "Subnational Taxes: Potentials and Problems," in S.J. Burki and G.E. Perry, eds., Decentralization and Accountability of the Public Sector. Annual World Bank Conference on Development in Latin America and the Caribbean (Washington: World Bank, 2000).

Richard M. Bird, *Intergovernmental Fiscal Relations in Latin America: Policy Designs and Policy Outcomes* (Washington: Inter-American Development Bank, 2001).

Richard M. Bird and Kenneth J. McKenzie, *Taxing Business: A Provincial Affair* (Toronto: C.D. Howe Institute, 2001).

Richard M. Bird and Enid Slack, *Residential Property Tax Relief in Ontario* (Toronto: University of Toronto Press, 1978).

Richard M. Bird and Enid Slack, *Urban Public Finance in Canada* (2nd ed.; Toronto: John Wiley & Sons, 1993).

Robin W. Broadway and Harry M. Kitchen, *Canadian Tax Policy* (3rd ed.; Toronto: Canadian Tax Foundation, 1999).

P.K. Brown and M.A. Hepworth, "A Study of European Land Tax Systems," Lincoln Institute of Land Policy Working Paper, 2000.

P.F. Dale, *Cadastral Surveys within the Commonwealth* (London: HMSO, 1976).

Claudia De Cesare, "Toward More Effective Property Tax Systems in Latin America," *Land Lines* (Lincoln Institute), January 2002, pp. 9-11.

William Dillinger, *Urban Property Tax Reform: Guidelines and Recommendations*. Urban Management and Municipal Finance (Washington: World Bank, 1991).

William Doebele and Orville Grimes, "Value Capture in Colombia," 1978. [?]

William A. Fischel, "Homevoters, Municipal Corporate Governance, and the Benefit View of the Property Tax," *National Tax Journal*, 54 (2000):

Henry George, *Progress and Poverty* (New York: Robert Schalkenbach Foundation, 1979 [1879]).

Milwida M. Guevara, Joyce P. Gracia, and Ma. Victoria C. Espano, "A Study of the Performance and Cost Effectiveness of the Real Property Tax," Manila, July 15, 1994.

Albert O. Hirschman, *Journeys toward Progress* (New York: Twentieth Century Fund, 1967).

Karla Hoff, "Land Taxes, Output Taxes, and Sharecropping: Was Henry George Right?" *World Bank Economic Review*, 5 (1991): 93-111.

Daniel M. Holland and William Vaughan, "Self-Assessment of Property Taxes," in Arthur P. Becker, ed., *Land and Property Taxation* (Madison, WI: University of Wisconsin Press, 1970).

Christopher Hood, *The Limits of Administration* (London, 1977).

Hiromitsu Ishi, *The Japanese Tax System* (3rd ed.; Oxford: Oxford University Press, 2001).

Simon H. Keith, *Property Tax in Anglophone Africa: A Practical Manual*. World Bank Technical Paper Number 209, Africa Department Technical Series (Washington: World Bank, 1993).

Harry Kitchen, *Property Taxation in Canada* (Toronto: Canadian Tax Foundation, 1992).

Harry Kitchen and Enid Slack, *Business Property Taxation*, Government and Competitiveness Project, School of Policy Studies, Queen's University, Kingston, Canada, 1993.

Harry Kitchen and Francois Vaillancourt, "The Federal Grants-in-Lieu of Property Taxes Program: An Assessment," *Canadian Tax Journal*, 38 (1990).

Jane H. Malme and Joan M. Youngman, eds., *The Development of the Property Tax in Economies in Transition*, WBI Learning Resources Series (Washington: World Bank, 2001).

Robert Maurer and Anne Paugam, "Reform toward Ad Valorem Property Tax in Transition Economies: Fiscal and Land Use Benefits," Land and Real Estate Initiative, Background Series 13, World Bank, June 2000.

William McCluskey, ed., *Property Tax: An International Comparative Review* (Aldershot: Ashgate, 1999).

William J. McCluskey and Riel C.D. Franzsen, "Land Value Taxation: A Case Study Approach," Lincoln Institute of Land Policy, Cambridge MA, Working Paper, 2001

Municipal Development Programme, *Property Tax in Eastern and Southern Africa: Challenges and Lessons Learned*. Working Paper No. 2, Municipal Development Programme for Eastern and Southern Africa, Harare, 1996.

Dick Netzer, *Economics of the Property Tax* (Washington, D.C.: The Brookings Institution, 1966).

Dick Netzer, "The Relevance and Feasibility of Land Value Taxation in the Rich Countries," in Netzer (1998).

Dick Netzer, ed., *Land Value Taxation: Can It and Will It Work Today?* (Cambridge, MA: Lincoln Institute of Land Policy, 1998).

OECD, *Taxes on Immovable Property* (Paris: 1983).

OECD, *Taxing Powers of State and Local Governments* (Paris, 1998).

OECD, *Fiscal Design Across Levels of Government. Year 2000 Surveys* (Paris, 2001).

Oliver Oldman et al., *Financing Urban Development in Mexico City* (Cambridge, MA: Harvard University Press, 1967).

Attiat F. Ott, "Land Taxation and Tax Reform in the Republic of Estonia," *Assessment Journal*, 6 (January/February 1999): 40-49.

William G. Rhoads and Richard M. Bird, "The Valorization Tax in Colombia: An Example for other Developing Countries?" in Arthur P. Becker, ed., *Land and Building Taxes* (Madison, WI: University of Wisconsin Press, 1969).

Jay K. Rosengard, *Property Tax Reform in Developing Countries* (Boston: Kluwer Academic Publishers, 1998).

Jonathan Skinner, "If Agricultural Land Taxation is So Efficient, Why is it So Rarely Used?" *World Bank Economic Review*, 5 (1991): 113-33.

Enid Slack, *Municipal Finance and the Pattern of Urban Growth*. Toronto: C.D. Howe Institute, Commentary No. 160, February 2002.

Enid Slack, John LaFaver, and Ihor Shpak, "Property Tax in Ukraine: Third Attempt," *Budget and Fiscal Review* (Fiscal Analysis Office, Verkhovna Rada), Second Quarter 1998.

David L. Sjoquist and Mary B. Walker, "Economies of Scale in Property Tax Assessment," *National Tax Journal*, 52 (1999).

Martim Smolka and Fernanda Furtado, "Lessons from the Latin American Experience with Value Capture," *Land Lines* (Lincoln Institute), July 2001, pp. 5-7.

John Strasma et al., *Impact of Agricultural Land Revenue System on Agricultural land Usage* (Burlington, VT: Associates in Rural Development, 1987).

Robert P. Strauss and Sean R. Sullivan, "The Political Economy of the Property Tax: Assessor Authority and Assessment Uniformity," *State Tax Notes*, December 21, 1998.

Vito Tanzi, "Pitfalls on the Road to Fiscal Decentralization," Working Paper No. 19, Carnegie Endowment for International Peace, Washington, D.C., 2001.

United Nations, *Manual of Land Tax Administration* (New York, 1968).

Joan M. Youngman, "The Hardest Challenge for Value-Based Property Taxes: Part II," *State Tax Notes*, April 26, 1999.

Joan M. Youngman and Jane H. Malme, *An International Survey of Taxes on Land and Buildings* (Deventer: Kluwer Law and Taxation Publishers, 1994).

George R. Zodrow, "The Property Tax as a Capital Tax: A Room with Three Views," *National Tax Journal*, 54 (2000):