

Georgia State University

ScholarWorks @ Georgia State University

ECON Publications

Department of Economics

2010

A New Paradigm for Property Taxation in Developing Countries

Roy W. Bahl

Georgia State University, rbahl@gsu.edu

Sally Wallace

Georgia State University, swallace@gsu.edu

Follow this and additional works at: https://scholarworks.gsu.edu/econ_facpub



Part of the [Economics Commons](#)

Recommended Citation

Bahl, Roy and Sally Wallace, "A New Paradigm for Property Taxation in Developing Countries" in Bahl, Roy W., Jorge. Martinez-Vazquez, and Joan M. Youngman. *Challenging the Conventional Wisdom on the Property Tax*. Cambridge: Lincoln Institute of Land Policy, 2010.

This Book Chapter is brought to you for free and open access by the Department of Economics at ScholarWorks @ Georgia State University. It has been accepted for inclusion in ECON Publications by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

6 A New Paradigm for Property Taxation in Developing Countries

Roy Bahl and Sally Wallace

The property tax is almost everyone's choice for the principal local government tax revenue source in developing countries. The focus of public policy on this tax and the interest it has drawn from public finance scholars and practitioners are evidence of its importance.¹ Moreover, both external donors and national governments have invested significant money in strengthening its administration. Despite all of the good work that has been done in designing more efficient property tax structures and administrations, property tax revenues still account for less than 1 percent of gross domestic product (GDP) and less than 4 percent of all tax revenues in developing countries. In terms of revenue mobilization in developing countries, the property tax is a rounding error. But the interest in its potential continues.

Why has reform not led to a more revenue-productive property tax? Why has the advice on administrative improvements so often been ignored? The answer to these questions may well lie with the flawed approach that has been taken in most reform exercises. Most analyses have ended up recommending reform programs that leave the property tax only marginally stronger in terms of revenue generation, but much more costly to administer. There is surprisingly little variation in this advice on how to strengthen the property tax.² The obvious question is, why should a low-income country spend heavily to improve the administration of a tax that will not yield much revenue?

This chapter proposes a different paradigm for property tax reform in developing countries. The unified property tax as outlined here would

¹ Three books of essays that review property tax practice in developing and transition countries are Bahl (1979); Bird and Slack (2004); and Bahl, Martinez-Vazquez, and Youngman (2008).

² For a good example of proposed reforms of the property tax in developing countries, see the Urban Unit (2006) for Pakistan.

bring together and restructure the traditional urban property tax, property transfer taxes, and various forms of land value increment taxes, and could generate enough revenue to justify the significant administrative costs involved.

The chapter begins with an economic model of the demand for property taxation that can explain why this tax is so little used. This is followed by discussions of the revenue performance of the property tax in developing countries and the high administrative start-up and running costs that constrain attempts to upgrade this performance. We then turn to a description of the practice and the issues surrounding each of the methods by which real property is now taxed in developing countries: the annual property tax, betterment levies, property transfer taxes, agricultural land taxes, and capital gains taxes. The question here is whether these taxes can be merged into an integrated structure and an integrated administration. Last, a framework is presented for a unified tax on immovable property that draws on a little-used database to make some estimates of potential revenue outcomes. The question investigated in this final section of the chapter is the extent to which raising property tax revenues to the equivalent of 1 percent of total land wealth would justify the necessary increase in administrative expenditures.

THEORETICAL MODEL

To get started, a relatively simple model is presented of individual choice over private goods X and public goods G . The individual maximizes utility:

$$U(X, G) \tag{6.1}$$

subject to a budget constraint,

$$Y = P_x X + S_1 T_1 + S_2 T_2 \tag{6.2}$$

where

T_1 = property tax collections

T_2 = other tax collections³

S_i = representation of individual's share of tax collections for tax i ; this is the "tax price"

Y = total income.

³ This could easily be expanded to a more complex function of tax base, tax rates, and population.

The government's budget constraint is as follows (normalizing $P_g = \$1$):

$$G = T_1 - a_1(T_1) + T_2 - a_2(T_2)$$

where a_j = administrative cost of tax system collection, enforcement, and so forth, expressed as a percent of collections $j = 1, 2$.

Net tax collections can be defined as

$$T_1^N = T_1 - a_1(T_1)$$

$$T_2^N = T_2 - a_2(T_2).$$

Given the relative experience with administrative costs in a variety of countries, it appears that there is a declining rate of change in the cost of administration as certain taxes expand, perhaps reflecting economies of scale in administration.

Returning to the maximization problem, a representative individual (median voter) maximizes utility subject to his or her own budget constraint. The government's budget constraint may also be used to derive the demand for T_1 and T_2 :

$$L = U(X, T_1 - a_1(T_1) + T_2 - a_2(T_2)) + \lambda(Y - P_x X - S_1 T_1 - S_2 T_2)$$

$$\frac{\partial L}{\partial X} = U^1(X) - \lambda P_x$$

$$\frac{\partial L}{\partial T_1} = \frac{\partial U}{\partial T_1} (1 - a_1) - \lambda S_1$$

$$\frac{\partial L}{\partial T_2} = \frac{\partial U}{\partial T_2} (1 - a_2) - \lambda S_2$$

$$\frac{\partial L}{\partial \lambda} = Y - P_x X - S_1 T_1 - S_2 T_2$$

Setting these first-order conditions to zero and solving yields

$$\frac{MU_{T_1}}{MU_{T_2}} = \frac{S_1(1 - a_1)}{S_2(1 - a_2)}$$

$$\frac{MU_{T_i}}{MU_x} = \frac{S_i}{P_x(1 - a_i)}$$

The demand for property tax is thereby a function of the taxpayer's tax price (S_1), P_x , and the relative cost of administering the property tax versus other taxes (a_1/a_2). A specific functional form for $U(X, G)$ would yield a

Copyright © 2010, Lincoln Institute of Land Policy. All rights reserved.

specific demand function for T_1 and T_2 . For example, a typical Cobb-Douglas utility function yields a demand function for T_i that is an inverse function of a_i . That is, as a_i increases, less T_i is chosen.

In this model, we assume an interior solution over the choice of T_i . Intuitively this is appealing due to taxpayer preferences regarding progressivity, intergovernmental fiscal arrangements, housing values, and the like. This simple model highlights the importance of administrative and compliance costs in determining the structure of taxes. For a given level of G , the tax with lower per unit costs (a_i) will be more heavily used. However, as G increases, if $\frac{\partial^2 a_i}{\partial T_i} < 0$ we may increase the use of one tax relative to another.

REVENUE PERFORMANCE

The revenue yield of the property tax in developing countries is very low. The best comparable data available (International Monetary Fund, various years) suggest an average yield equivalent to only about 0.6 percent of GDP (table 6.1). De Cesare (2004) finds a similar result for Latin American countries. This is not enough revenue for the property tax to be classified as a major tax.⁴ By comparison, the average ratio of total tax to GDP is about 15 percent for developing countries. Note also from this table that the property tax share in GDP is more than three times higher in the Organisation for Economic Co-operation and Development (OECD) countries than in developing countries.

Bahl and Martinez-Vazquez (2008) point out that developing countries may not use the property tax more intensively than OECD countries do, but they rely more heavily on the property tax to finance subnational government expenditures. This gives a different perspective on the issue, that is, that the property tax in developing countries is an important part of the strategy for fiscal decentralization even if it is not an important part of the strategy for revenue mobilization. However, one must be careful with this interpretation. For example, it may be a reflection of relatively lower subnational government expenditures, that is, the 18 percent of total subnational government expenditures that is financed by the property tax may itself be a very small number. Another drawback is that local governments in less

⁴ In fact, the International Monetary Fund does not report the annual property tax separately in *Government Finance Statistics*, but includes it with taxes on the use, ownership, or transfer of wealth. Its definition includes property taxes that are levied at regular intervals, one time only, or upon a change in ownership.

TABLE 6.1 Property Tax as Share of GDP (percent)

	1970s	1980s	1990s	2000s
OECD countries	1.24	1.31	1.44	2.12
(number of countries)	(16)	(18)	(16)	(18)
Developing countries	0.42	0.36	0.42	0.60
(number of countries)	(20)	(27)	(23)	(29)
Transition countries	0.34	0.59	0.54	0.68
(number of countries)	(1)	(4)	(20)	(18)
All countries	0.77	0.73	0.75	1.04
(number of countries)	(37)	(49)	(59)	(65)

NOTES: The average for the 2000s is for the years 2000 and 2001. OECD=Organisation for Economic Co-operation and Development.

SOURCE: Calculations in Bahl and Martinez-Vazquez (2008) based on data from International Monetary Fund (various years).

developed countries have been given fewer tax options than in the OECD countries.

A number of hypotheses have been offered to explain why property tax revenues are so low in developing countries. Arguably the most important reason is that the property tax works best as a local government tax, and fiscal decentralization has not been as embraced in developing as in industrialized countries. Bahl and Martinez-Vazquez (2008) use data from a panel of 70 countries for 1990, 1995, and 2000 to show a significant positive effect of both expenditure decentralization and the level of per capita GDP on the level of the effective property tax rate.⁵ Higher income countries and countries that are more decentralized use the property tax more intensively.

Another explanation for the low level of revenues raised by the property tax is that efficient administration is costly, both in terms of the setup (fixed cost) and the operating costs. In particular, proper valuation and revaluation are thought to be beyond the reach of most subnational government tax administrations, unless very significant expenditures are made to put the capacity in place. The barriers to efficient administration also include the absence of a full and up-to-date survey of all land (urban and rural) and records of title that would enable determining tax liability. Putting the human resource infrastructure and the information base in place to efficiently administer the property tax would also be an expensive proposition. At current yields of the property tax, it would be difficult to

⁵ The effective rate of property tax is measured as the ratio of property tax collections to GDP.

justify such outlays, by either the central or the subnational levels of government. The result is that most developing countries improve their administrations with marginal changes rather than with comprehensive reforms.

There also is the issue of taxpayer resistance to higher taxes. The strength of the sentiment against higher property taxes seems disproportionate to the amount of property taxes paid. Note the very low absolute and relative levels of tax paid in the selected set of countries shown in table 6.2.

There is no hard research that addresses the reasons for the unpopularity of the property tax in developing countries and for the political tensions that surround most property tax reforms. One might offer a number of hypotheses to explain the unpopularity and tensions. First is the visibility of the annual property tax, that is, people know how much property tax they pay, and they often pay this amount in one lump sum. By contrast, who could even guess at how much value-added tax (VAT) they pay? Second, the annual property tax is levied on accrued property wealth, rather than on realized income from that wealth. This suggests the possibility of a break between the amount of tax liability and the ability to pay the tax. Third, assessment is judgmental rather than objective as in the case of sales or income taxes. Fourth, some would argue that there is something special about the attachment of people to their land, and this is especially true in developing countries and particularly so in rural areas. Fifth, there is the complaint from the local population that present levels of public service provision are not good enough to justify an increase in property tax revenues. Whatever the reason, there is ample evidence of governments refusing to raise property tax rates to authorized levels, postponing the introduction of new valuation rolls, and providing generous relief to what are seen as high tax burdens.

TABLE 6.2 Per Capita Collection of Selected Taxes (in U.S. dollars)

<i>Country</i>	<i>Property tax</i>	<i>Income taxes</i>	<i>General sales taxes</i>
Chile (2002)	30	197	476
Russia (2001)	26	186	241
Indonesia (2004)	8	61	70
Egypt (1997)	3	67	54
Latvia (2004)	45	451	592
Kazakhstan (2004)	19	235	216
Canada (2004)	1,100	4,921	2,649

SOURCE: Calculations based on data from International Monetary Fund (various years).

Another contributing factor in this weak revenue performance is the social engineering of the property tax that sometimes leads to a dramatic narrowing of the base. Perhaps the most common of the preferential treatments is that for owner-occupiers. The goal is to encourage homeownership (or perhaps to gain political favor with these taxpayers), but the result is to narrow the tax base. A recent study of Punjab province in Pakistan estimates that bringing owner-occupied property fully into the tax base would triple the level of property tax revenues (Bahl, Cyan, and Wallace 2008). Other preferential treatments that harm the tax base are the exemption of government properties and the provision of an overgenerous exemption level for low-income properties.

Finally, there is the issue of enforcement. Local government officials are close to the political power structure in the local area, that is, both wealthy individuals and businesses. Since wealthy individuals and businesses usually represent a large component of the potential tax base, elected local politicians may find it politically difficult to bring aggressive enforcement measures against delinquents. In addition, they may be subjected to considerable pressure to provide exemptions to the politically powerful.

PROPERTY TAX ADMINISTRATION

Poor administration of the property tax has been decried by almost all observers. It is pointed to as the main reason why revenues are so low and why the tax is perceived to be so unfair. Most reform studies have focused on administration as the top priority for attention, and there has been considerable uniformity in the recommendations made. Most property tax reform studies do not cost out the proposed changes, but most agree that these would be expensive relative to the amount of revenue collected at present rates. It is important to note that there are two kinds of costs to be reckoned with: large one-time outlays to develop the basic systems and the operating costs associated with normal tax administration duties and maintenance of the system.

The first need is to identify all land and improvements that should be on the tax roll. The completion of a full cadastre is an expensive project in most developing countries, which can involve both aerial photography and tax mapping.⁶ The usual case in developing countries is that some land and many structures are not on the tax roll. The identification of all taxpayers is also a complicated process, because of unclear or nonexistent

⁶ The term *cadastre* is used here in a general sense to refer to all land records, ownership records, and property tax information (Almy 2004).

titles, and because of absentee ownership. Without these initial surveys of property and ownership, and a method to link them, a more productive property tax is not possible.

Second, it is important to upgrade record-keeping methods and systems. An up-to-date property tax roll is necessary. This involves tracking all new improvements to properties, as well as any subdivision of properties. For the property tax to be effective, there must be a timely and accurate flow of data through the system. This involves new staff, interdepartmental coordination, and a significant investment by the government. To track this information, it is necessary to implement a proper record-keeping system.

Third, and arguably most important, is the need for a proper valuation system. This system should be staffed with adequate numbers of trained valuers and must be supported by good data on comparative sales values. The former is costly, but could be done; however, comparative sales data simply do not exist in most countries and are usually replaced by the “expert judgment” of realtors, government valuers, and so forth.

Finally, all systems for identifying land values and tracking tax payments should be linked. This includes all taxes on real property and all sales of property.

Can the development and maintenance of a cadastre be done better by a central authority or by a local government? In some transition countries in Eastern Europe, the organizational responsibility for the records and for valuation lies with a central authority, such as the State Land Cadastre in Lithuania (Aleksiene and Bagdonavicius 2008). A central valuation authority arguably is able to gather more professional expertise in a single place and develop better analytic systems. Lithuania’s fully computerized property registration system links databases on land and buildings and includes all parcels in the country. Another advantage of the independent authority arrangement is that it can be one step removed from political pressures. Some would be more cautious about relying on a central authority. Kelly (2000) argues that when local governments receive the revenues, efficiency demands that they must play the major role in preparation of the tax roll and in assessment. In several Latin American countries, there is a gradual shift of administrative responsibilities to local governments, based on their capacity to absorb these new responsibilities (De Cesare 2004).

Last, there are the issues of collections, enforcement, and appeals. Upgrading collection capability is not an expensive proposition. Many countries have actually found that moving the collection point to banks and introducing other simplification measures costs less and is more efficient.

Also significant is the question of settling disputes over property tax liability, as well as dealing with a court system that is clogged with work and is often without sufficient expertise in property taxation. In developing countries, collection rates of 50 percent of total demand are not unusual (Bahl and Martinez-Vazquez 2008).

Ideally, an estimate of a benchmark cost for property tax administration at an efficient level would be available. This is defined here as what it would cost to develop a property tax that could generate revenue yields equivalent to about 1 percent of property wealth, in a fair way and with an operating cost equivalent to about 5 percent of collections. It is no easy matter to estimate either the start-up cost or the running costs from cross-country comparisons, as Almy (2004) has pointed out. Partly this is because countries are very different in terms of their starting point, that is, the quality of the administration that they have now. They also differ in terms of the structure of their property tax, the effective rate (higher effective rates suggest lower cost per unit of revenue), and even in terms of what overhead they might count in their administrative cost. “However, annual administrative costs in the range of 2 to 5 percent of revenues often are achieved in developed western countries. Ratios in excess of 10 percent are symptomatic of problems” (Almy 2004, 25). A recent questionnaire study carried out by the International Property Tax Institute (2007) finds that agency costs average about 1.35 percent of taxes collected, around a minimum of 0.13 percent and a maximum of 3.69 percent. The respondents were mostly from industrialized countries.

THE ANNUAL PROPERTY TAX

The annual property tax, which draws the most reform attention, is often restricted to urban areas in developing countries. Depending on the country, the tax is levied by local governments (Brazil), state-provincial governments (India), or in many cases under central government law (China, Indonesia). Depending on the country, the tax basis can be (1) annual rental value; (2) capital value of land and improvements; (3) capital or rental value of the land; or (4) a combination of location value and area. Each of these four bases holds some attractions, but also some weaknesses. These comparative advantages and disadvantages are reviewed here, in particular, looking at how each base could fit as part of a unified land-property tax system.

Rental Value Systems

Many countries, especially former British colonies, hold to the rental value system. This is partly because of historical reasons, but also because of the possibility of using mass valuation for the many rented flats in urban areas. In theory, the tax base is notional, that is, it is the rent that can be reasonably expected in a fair market transaction. In practice, it bears little relationship to market rent because of how it is assessed and because the rental value law is confusing. The law is unclear about the tax base for vacant lands and about whether the tax base for rent-controlled properties should be market rent or controlled rent.⁷ Moreover, the concept of market rent is especially difficult to determine in the case of owner-occupied and nonresidential property. Given the assessment practices that are normally used, few would argue that the discounted value of expected annual rents is equal to market value.

There is no evidence to suggest that a rental value system is more or less costly to administer than a capital value system.⁸ However, it does not lend itself to the comparative sales approach (which is usually based on capital values of property transactions). Nor is it a good fit in a system that depends on a property transfer tax, a capital value tax, or value increment capture, since all of these are based on the concept of changes in the total value of the property.

Capital Value Systems

Capital value systems get around some of these issues. Since the legal base in most countries is the true market value at sale, conceptual problems with defining the base in cases of vacant land, rent-controlled properties, and land used for nonresidential purposes are mostly eliminated. It is also true that the capital value base for the annual property tax is consistent with that for transfer taxes and capital gains taxes.

Capital value systems, however, bring new and in many ways even more difficult problems. The valuation process requires accurate data on sales values of properties, which are not available in developing countries. Instead, expert judgment must be called upon, that is, ad hoc work by realtors and other knowledgeable people with expertise in such matters. And even if imperfectly done, the separate valuation of land and improvements

⁷ For example, Pakistan's courts have ruled that vacant land has no rental value.

⁸ To make such a cost comparison, one would need to hold constant the level of assessment efficiency, that is, the percent of market value actually assessed, and the amount of dispersion in this assessment ratio.

imposes a significant administrative cost. The valuation process requires information about structures (e.g., size, quality of construction), and this is another cost-increasing factor for the administration.

Land Value Systems

The tax base for site value systems is the market value of land. There are two advantages to this approach. One is that the cost is lower because structures are not included in the tax base. Another is the well-known advantage that it encourages the most efficient use of land. Site value systems are used in such diverse places as Australia, South Africa, New Zealand, Denmark, Estonia, Jamaica, and Kenya.

Some see serious problems with site value systems. The number of sales of vacant properties that can be used for calculation of a comparable sales value is limited in many urban areas, so it is difficult even to estimate the division of property value between land value and building value (Mills 1998). This criticism is less relevant in developing countries because land and improvements tend to be valued separately in any case. Reschovsky (1998) argues that the techniques that assessors have developed allows for assessing land even in the absence of a large number of vacant land sales. Another problem with the site value tax is that the value of the tax base is smaller because improvements are not included, so the statutory rate must be higher to yield any given amount of revenue. This causes taxpayer resistance, as does the failure to tax visible, high-valued structures.

The site value base does not match up well with the base on property transfer taxes. The latter are usually levied against the total selling price of the property (both land and improvements). There might be a better match with capital gains taxes if the levy is only against the land. The value capture taxes such as betterment levies can be imposed on increases in land values or increases in total property values. A case could be made for the superiority of the land base because public improvements or rezoning primarily affect the location value of the land. Finally, rural property taxes are probably better based on land alone.

Area-Based Systems

The area-based systems of property taxation give the appearance of being very simple and objective. Each parcel is taxed at a specified rate per area unit of land and per area unit of structures. Chinese cities, Polish municipalities, Tunisian communes, Bangalore city in India, and Peshawar city in Pakistan use the area-based system, suggesting its broad appeal. Many would argue

that the advantage of area-based systems is that they do not require valuation of individual parcels. But the fact is that area-based systems are not as simple as they seem. First, the location value (the tax rate) must be established, suggesting an assessment method not unlike that required for a site value base. Typically, several tax rates will be set for a local government, depending on the location value of various neighborhoods. Second, these tax rates (location values) must be changed as the amenities provided in various areas change, and as the land value gradient changes. This suggests a need for periodic re-valuation, just as in the case of value-based systems. Third, the physical measurement of structures must be kept up to date, and the valuation table (tax rate table) for structures also must be changed regularly.

An area-based system could fit a unified property tax, if a system was put in place to regularly update the notionally determined values. In fact, rural property taxes, including agriculture, probably will be assessed in a notional way irrespective of the property tax base that is chosen. In some countries, capital gains are determined in a notional way. Still, at some point in the development of the property tax, there must be a move toward an objectively determined value base, and the area-based systems do not appear to promise this.

Which Is Best?

Various studies have examined these tax bases and offered reform ideas as to how the problems with each might be overcome. These ideas are summarized in appendix table 6A.1. If there is a theme here, it is the trade-off between simplification and low administrative cost (the area-based system) and valuation cost (any of the other three). To the extent there is a current trend in developing countries, it would seem to be in the direction of the simplification choice. The conclusion that might be drawn from this is that countries are resigned to low levels of property tax revenues, so they are hesitant to invest heavily in tax administration.

The question might be changed from which is best to which of these systems might fit best into a unified property tax that combined the annual property tax, value capture, and transaction-based taxes. The capital value approach could be argued to be most consistent in that it taxes a capital value base, and it could best use the comparative sales data generated from transactions. The rental value and site value systems would seem less able to use this information, though a good case might be made for taxing only the capital value of the land. An area-based system could support a unified property tax in the short run, but only as a bridge to a capital value tax on land and/or improvements.

TAXES ON PROPERTY TRANSFERS

The other widely used tax on immovable property is the transfer tax, that is, a tax on the sales value of properties. In developing countries, this is usually levied as part of the stamp duty on documents or a separate property transfer tax. Depending on the country, these may be levied as central, provincial, or local government taxes.

Stamp duties are a component of the tax system in most developing countries, but they are widely criticized. The fundamental question raised by critics is “why have a stamp duty on property transfers?” In fact, there are good answers to this question. Clearly there is need to legalize documents and ensure that they are properly filed, and a government stamp is part of the procedure for doing this. To levy a service charge that would cover the stamping and verification cost would seem a reasonable justification for this duty. There even might be some justification for differentiating the rate of charge by type of document, given the different degree of examination required for various types of documents. Problems with this levy arise with respect to property transfers (and transfers of shares).

The role of property transfer taxes in developing countries has now gone well beyond documentation of a change in ownership. In fact, there are several reasons why real estate transfer taxes have found their way into tax systems in developing countries, and why their staying power is so great. First, it is an easy tax handle because most buyers and sellers desire to legally record the transfer and therefore will voluntarily comply. Second is the revenue motivation and what might appear to be a very low cost of collection. When property values escalate, as happens periodically in most countries, the revenue take can be quite significant. In some cases, higher property transfer tax rates are used to cool down overheated property markets. Property transfer taxes are never a major source of revenue in developing countries, but they raise enough to protect their place in the tax system. For example, property transfer taxes and stamp duties account for 4 percent of central government taxes in Jamaica and 38 percent of own-source revenues in Punjab province, Pakistan.

Third, if property ownership is concentrated in the higher income classes, the distribution of tax burdens may be progressive.⁹ Fourth, the number of people paying transfer taxes in any given year is much smaller than the number of those paying more general taxes, hence the opposition

⁹ Because data are limited, it is not possible to determine if the tax is borne by buyers or sellers. However, to the extent that the tax on land is capitalized into land values, it is probably borne by all owners of land. Since landownership is concentrated in the higher income brackets, the distribution of the tax burden will be progressive (Alm, Annez, and Modi 2004).

to the tax is not as great as it would if, say, an increase in the annual property tax or the VAT were proposed. Finally, a property transfer tax might reach that part of the population that ordinarily avoids payment of most income taxes and VATs.

There are major disadvantages to the property transfer tax. First, it raises the cost of property transactions, thereby reducing the volume of formal transactions and slowing the development of the real estate market. Properties may be held in suboptimal uses because the tax is large enough to discourage a transfer, and this imposes an efficiency cost. Second, if the tax is properly assessed, administrative costs could be very high, because of the need to verify the declared sales prices and revalue when necessary. In many countries, declared values are not checked for accuracy. Bahl's study of over 26,000 property transactions between 2001 and 2003 in Jamaica (where the transfer tax rate is 13 percent) shows that only about 7 percent of the declared values were audited (Bahl 2004). Alm, Annez, and Modi (2004) report that 70 percent of property transfers in Maharashtra State (India) are undervalued by about 20 percent. There is a long list of countries with the same experience. Third, a property transfer tax gives property owners an incentive to understate taxable value, and so it weakens the database that is necessary for objective assessment of the urban property tax. This problem is not so often discussed but it is a very great shortcoming of the property transfer tax.

A moment's reflection will lead one to the conclusion that the problems with the property transfer tax are dependent on the level of the nominal tax rate chosen. At very low rates, these problems may be of little consequence. But when the tax rate is high, the implications of these problems are magnified. For example, Alm, Annez, and Modi (2004) studied Indian states with different stamp duty rates and found that underdeclaration of sales prices tends to rise with the stamp duty rate.

In fact, countries choose very different statutory rates of taxation on the value of property transfers. An illustrative list of rates for various countries is shown in table 6.3. These data suggest a great deal of variation in the practice. South Africa, for example, taxes property transfers with a sliding rate that rises to 8 percent and subjects these sales to a 14 percent VAT when the sale is made by a VAT vendor (e.g., a property developer).¹⁰ But in many countries, the rates are much lower. The reform options most often seen for property transfer taxes in recent years are reductions in the rate to mitigate the problems described above. Examples include the Czech Republic in 2003, Portugal in 2003, Taiwan in 2003, and Dominican Republic in 2003.

¹⁰ In the case of a VAT vendor, the transfer tax can be taken as a credit against the output tax.

**TABLE 6.3 Property Transfer Taxes on Real Estate:
Selected Countries**

<i>Country</i>	<i>Tax rate</i>
Pakistan	
Punjab	6 percent
NWFP	7.5 percent
Jamaica	13 percent
Portugal	Graduated rate ranging from 2 percent to 6.5 percent. Rate varies by value and land use.
Germany	3.5 percent
Slovakia	1 percent to 6 percent, depending on value
Czech Republic	3 percent
Netherlands	6 percent
Bhutan	5 percent
Taiwan	7.5 percent
Mauritius	Between 5 percent and 10 percent
Swaziland	Between 3 percent and 4 percent, depending on value
Costa Rica	1.5 percent
El Salvador	Up to 3 percent depending on value
Kenya	4 percent
Malta	12 percent
South Africa	Graduated rate ranging up to 8 percent
Dominican Republic	3 percent

SOURCES: Pakistan: data supplied by Provincial Government Officials; Jamaica: Bahl (2004); Portugal: *Tax Notes International*, April 21, 2003, 227; Germany: *Tax Notes International*, January 14, 2002, 102; Slovakia: *Tax Notes International*, March 8, 2004, 915; Czech Republic: *Tax Notes International*, January 5, 2004, 26; Netherlands: *Tax Notes International*, June 16, 2003, 1093; Bhutan: International Bureau of Fiscal Documentation, *Taxes and Investment in Asia and the Pacific*, Supplement No. 104, 1993 (www.ibfd.org/); Taiwan: International Bureau of Fiscal Documentation, *Taxes and Investment in Asia and the Pacific*, Supplement No. 165, 1998 (www.ibfd.org/); Mauritius: International Bureau of Fiscal Documentation, *African Tax Systems*, Supplement No. 117, 2000 (www.ibfd.org/); Swaziland: International Bureau of Fiscal Documentation, *African Tax Systems*, Supplement No. 105, 1997 (www.ibfd.org/); Costa Rica: International Bureau of Fiscal Documentation, *Latin American Taxation Database*, Supplement No. 122, 2000 (www.ibfd.org/); El Salvador: International Bureau of Fiscal Documentation, *Latin American Taxation Database*, Supplement No. 113, 1998 (www.ibfd.org/); Kenya: McCluskey and Franzsen (2001); Malta: *Tax Notes International*, March 27, 2006; South Africa: Transfer Duty Act of 1949 (as amended); Dominican Republic: *Tax Notes International*, February 4, 2008.

BETTERMENT LEVIES

Properties may also be taxed according to the benefits received from public investment or development decisions, for example, the construction of an access road to their neighborhood, an improved sewer system, or a change in zoning from rural to urban. Such actions will lead to an unearned increment in land values. The theory behind recapture of part of this increment

with a betterment levy is that certain property owners will benefit from these actions more than property owners in general, and therefore a special levy is justified. Such levies take many forms, and go by several names, depending on the country, for example, special assessments in the United States, *plusvalías* in Columbia, and betterment levies in South Africa.

The administrative conditions for implementing a betterment levy seem manageable enough, even in developing countries:¹¹

- A quantifiable impact on land values
- Identifiable beneficiaries
- A public mechanism to implement the levy
- The political will to implement the levy

Normally, betterment levies are charged on a one-time basis, with a rate set to capture a percentage of the initial impact on land values. So, even if the estimated increment is overstated, it will not amount to full confiscation of the increase. Or public agencies may be content with capturing only a portion of the full cost of a public investment, as in Korea.

There are a number of problems with the implementation of betterment levies, and perhaps this explains why they are not used more frequently in developing countries. The measurement of the impact on land value is a problem. It is not possible to estimate, on a one-off basis, the value to a property of an infrastructure investment or a change in the zoned use of land. This is because the impact of a public investment on land values may take years to play out.

Another problem is the difficulty of separating the overlapping roles of betterment levies, annual property taxes, property transfer taxes, and capital gains taxes on real property. A policy question to be answered in rationalizing property tax policy is how to avoid taxing the same base with two different instruments. Betterment levies supposedly charge, on a one-time basis, for land value increments due to public investments, while annual property taxes also should reflect these value increases in the base that they tax. A capital gains tax or a property transfer tax would subsume all value-enhancing factors (including betterment) in its base.

RURAL LAND TAXES: AGRICULTURE

Many would argue that the agricultural sector is undertaxed. The case might be put forward with an example: Though agriculture's share of national income is about 25 percent in India and Pakistan, the sector pays

¹¹ The conditions are elaborated in Day (2005).

a very small percentage of tax revenue. Moreover, the World Bank (2007) argues that the net taxation of agriculture has fallen dramatically in most countries during the last 20 years. Anderson (2009) finds that in Pakistan the effective level of taxation of agriculture declined from approximately 18 percent to less than 5 percent.

Certainly there is justification in many countries for taxing the agricultural sector more heavily. First, agricultural income is usually exempt from income tax, so nonfarm households at any given income level face a higher tax burden on their labor income than do agricultural households. Although there are certainly inequities in other parts of the tax system, this one can be particularly egregious when the federal income tax generates a significant portion of revenue for the central government and when there are large numbers of individuals employed in the agricultural sector.

Second, because agriculture is such a large part of the economy in many developing countries, not taxing agricultural income means that effective tax rates on other sectors of the economy must be higher (or public service levels must be lower). This is bound to decrease the economic efficiency of the tax system as taxpayers in these other sectors seek ways to avoid or evade those higher taxes. Third, increased taxation of agriculture may be justified, on the principle that government infrastructure and various subsidies provide benefits to the agricultural sector.

That said, the problems are how to get past the political obstacles to taxing agriculture and how to administer a tax on what Rajaraman (2004) has termed the “hardest to tax” sector. One reasonable reform option is to adopt a land-based agricultural income tax. In fact, this is provided for in the law in some countries, with revenues usually assigned to subnational governments. Administration of an income tax using the normal methods of assessment is quite possible for large farms that operate in the modern sector. For most farms, however, an accounts-based administration would be impossible. An alternative approach, discussed in Rajaraman (2004) and Bahl, Cyan, and Wallace (2008), is a presumptive tax based on land area and crop. Such a levy would capture the significant differential net returns from different crops (and arguably the differential productivity of the land). All farms above a certain acreage size would be subject to this tax. Assessment would seem manageable, if a full survey of agricultural land was in place and kept up to date.

Rajaraman’s (2004) caution about the hard-to-tax agricultural sector can be taken beyond administrative concerns, to the political power of the sector that often leads to favored tax treatment. Bird and Slack (2008) provide an interesting summary of the many different kinds of preferen-

tial treatments of farmland that are provided around the world. The results of such treatment (e.g., lower rates and preferential assessments) have been to further widen the tax burden gap between agriculture and the rest of the economy.

RURAL LAND TAXES: NONAGRICULTURE

Rural local governments in many countries levy a local property tax on nonagricultural land.¹² For example, this is the main source of revenue for India's village (*gram panchayat*) governments. These taxes tend to be very primitive and are usually levied on an area basis or even a house basis rather than on a value basis. The yield tends to be very low, because the tax roll usually does not cover all properties and because collection rates are low. Enforcement is so lax in many places that the property tax is an all but voluntary levy.

The case of India is illustrative of the practice in poor countries. Rao, Nath, and Vani (2004) estimate that collections by rural local governments in Karnataka State average well less than \$1, and that collection costs are more than half the amount collected. Bahl, Sethi, and Wallace (2008) found tax levels to be almost as low in West Bengal State, but noted a significant variation across the 3,300 *gram panchayats* in the state. Some local governments had been able to move their collections to a level well above the state-wide average. In a regression analysis of over 3,000 *gram panchayats*, they found that the level of per capita own-source revenues (mostly property tax) was significantly and positively related to the literacy rate, suggesting a positive marginal effect of economic development and voter awareness about the need for local revenues. This underlines the point that communication is an essential ingredient of success with rural local property taxation.¹³

Despite their low level of revenues, there is a strong case to be made for rural local government property taxes. This is virtually the only significant source of revenue open to these local governments and hence the only way to develop taxpayer accountability for the quality of services the government provides. In recent years, India, Colombia, and South Africa, among others, have rethought the structure of their systems of rural local government revenue mobilization.

¹² For a good review of this subject, see Bird and Slack (2008).

¹³ See Zhou (2006) for a discussion of the role of communications in the decentralization efforts in Sierra Leone.

CAPITAL GAINS AND SALES TAXES

The sale of property is a taxable event not to be missed in developing countries where tax administration is weak. Although this has pushed most countries toward the adoption of property transfer taxes, there have always been alternatives in the form of a capital gains tax on real property or the inclusion of the sale of real property in the VAT base.

A capital gains tax on property (real estate) would serve the purposes of generating revenues and closing off an avenue of avoidance of income taxes. The base of the tax would be the difference between the sales price of the land and the (adjusted) purchase price. In theory, this is superior to the property transfer tax because it taxes the profit on the original investment and not the investment itself. In fact, there is some use of capital gains taxes on immovable property in low- and middle-income countries, as well as some examples of inclusion of sales of real property in the VAT.

One might conclude that the tax administration in most developing countries is not yet ready to support an effective capital gains tax on real property. Certainly this is an issue, and it does seem clear that notional rather than actual capital gains would need to be used as the basis for assessment. However, the present system of taxing property transfers would seem no more manageable, and there also, notional values are used. Given the very great problems with underdeclaration of property transfer values and the harm this causes, the alternative of a capital gains tax is not so far-fetched.

Wallace (2008) surveys various capital gains taxes on real property and finds that most are hybrids that do not tax real gains. Very few of these hybrids are found in developing countries. Two that might be mentioned are Korea and Taiwan, where capital gains taxes were levied when both were considered developing countries. Taiwan has long imposed a kind of capital gains tax on land (the land value increment tax, or LVIT). The government declares an official selling price for all properties once each year. The tax is imposed on the difference between the officially decreed value in the year of sale and the original decreed value or the assessed value at the last transfer. Transfers between farmers are exempt. The statutory tax rates are progressive, with the top marginal rate equal to or above that of the individual income tax (Tsui 2008).

A capital gains tax on real property was levied in Korea through the 1990s, primarily to discourage land speculation. Unlike the Taiwanese version, the Korean tax was levied every third year on unrealized gains. The base included idle land, nonbusiness land owned by firms, and excess residential lands. The tax rate by 1995 was 50 percent of “excess profits,” which were

Copyright © 2010, Lincoln Institute of Land Policy. All rights reserved.

defined as land value increases above the national average during a three-year period. Land value increases were estimated by government (Lee 2000).

Most developing countries, however, have not adopted capital gains taxes, and they seem comfortable with property transaction taxes. The reason for this might be the fear that a capital gains tax could not be administered in most developing countries or that it might introduce discrimination in the tax treatment of immovable property and other assets.

Another choice would be to eliminate the stamp duty and property transfer tax and bring real estate transfers by businesses under the value-added tax. Buyers and sellers would have an incentive to report correctly, and a more accurate flow of information about land values would result. The tax would be levied at the VAT rate on the selling price of land, less the (real or notional) tax paid on the purchase price. This would violate the notion of a VAT as a consumption tax since housing is consumed over many years. The practice varies widely among the industrialized countries. Some countries cover certain types of property sales under the VAT (e.g., new versus used buildings, as in Germany and Belgium), some zero-rate new buildings (as in the United Kingdom), and there are numerous types of special treatments and exemptions. A good discussion of the treatment of real property under the VAT is in Bird and Gendron (2007, 81–86).

PROPOSAL: A GLOBAL PROPERTY TAX

Property tax reform in developing countries has failed, in part because the cost of making the necessary administrative improvements is too high relative to the potential revenue yield from this investment. Many countries have addressed this problem by reducing administrative expenditures with shortcut methods of valuation, which further limits the growth potential of the tax, and the vicious circle continues. The proposal here is to rationalize the system of taxing real property and to increase the revenue yield from property taxes to a level where the significant increase in administrative expenditures could be justified.

To accomplish these goals, a unified property and land tax is proposed, as summarized in table 6.4. The idea is to create a property tax that is administered by a single department that would cover all forms of tax on real property. There would be four levy components embedded in this unified property tax: An annual property tax on urban property and on rural property not used in agriculture, a land-based tax on agricultural property, a betterment levy, and a capital gains tax.

First, all nonagricultural property in the jurisdiction of the taxing authority (e.g., the province) would be subject to an annual property tax.

TABLE 6.4 A Global Property Tax

<i>Present system</i>	<i>Proposed system</i>	<i>Comments</i>
Annual urban property tax	Annual urban property tax with a higher effective tax rate and an improved administration	
Annual rural property tax	Introduce an annual rural property tax with a tax administration that can identify and assess liable properties	Only rural properties not used in farming would be covered by this tax.
Property transfer tax levied at the time of transfer	Merge into the annual urban and rural property tax	There would no longer be a stamp duty on property transfers.
Various agricultural income taxes, land taxes, and cesses	Presumptive tax on income based on land and crop	This would be applied only to land used in farming. The tax rate would be specific, but would vary by crop. There would be a threshold based on acreage, below which there would be no tax.
	Capital gains tax	The selling price would be determined notionally in the first years after implementation. The base price would be determined by sales records or by a notional determination. Sales by VAT would be taxable under VAT with a credit for capital gains taxes paid.
Betterment levies, special assessments, and so forth	Betterment levies	

NOTE: VAT=value-added tax.

Copyright © 2010, Lincoln Institute of Land Policy. All rights reserved.

The base would include both urban and rural property. For all urban land and all rural land not used in farming, it would be a tax on the capital value of land and structures in current use. The tax rates would be set by the province or local governments under a decentralized system. Either way, the expectation is that tax rates in urban areas would be higher than those levied in the rural areas, reflecting the higher cost of urban service delivery. The choice of a capital value base on land and improvements is to gain some parity with sales values reported at the time of property transfers. The transfers would not be taxed, but the reported sales values would become an important basis for valuation of the annual property tax base.

Second, agricultural land would be subject to an annual tax, imposed as a presumptive income tax. The tax would be levied on the land area of each farm, and the (specific) tax rate would vary by crop to reflect soil productivity. Data on crops planted would be kept current. There would be a threshold level, below which no tax would be levied.

Concurrent with the adoption of an annual tax on all property, the existing property transfer tax would be abolished. The rationale for this proposal is straightforward. If transfer taxes represent a general revenue, that is, a payment for public services received, this payment should be extracted yearly rather than at the time of a transfer. Moreover, eliminating the transfer tax would remove the disincentive for underdeclaration of sales values and would make it easier to develop a database on comparative sales that could be used for valuation under the annual property tax. Eliminating the tax on transactions would have the added value of hastening the development of a real estate market and improving the efficiency of land use allocation.

Not all will agree with the proposal to eliminate the tax on property transfers. One reason is that a property transfer is an event that is easily identified by the tax collector. Undervaluation may be common, but completely escaping the tax probably is not. Why give up a sure thing? Abandoning the property transfer tax could lead to a revenue loss, at least in the short run. Another reason why some would argue that the present regime cannot be abandoned is that property transfer taxes are a proxy for capital gains taxes on property investments. This is not a good justification for the traditional transfer tax because the sales price of a property probably bears little relationship to the size of a capital gain. The capital gain depends on the real appreciation in value since purchase, whereas the property transfer tax depends solely on the gross selling price irrespective of any other factors, including whether or not any gain had been made.

Accordingly, a capital gains tax on immovable property sales would be established as the third component of this reform program. This would be

in addition to the annual land tax already proposed. In theory, the concept of a capital gains tax on immovable property is straightforward. The tax liability would be the difference between the buying and selling price of the property, indexed for inflation. The buying price (base) would be set according to historical records of purchase price or could be determined on a notional basis. Owners could petition, and bring evidence, to have the basis increased. The original purchase price would be verified by the valuation staff in the capital gains tax office. At least in the early years, the selling price would be a notional determination. Note, however, that there would be a self-enforcing feature. Buyers would not have a disincentive to underdeclare the purchase price because their basis for a future tax on capital gains would be too low. The nominal gain would be adjusted for inflation and for the cost of allowable improvements to the property (e.g., irrigation).

The implementation of a capital gains tax on real property raises some serious administrative issues:

- How would records of the original selling price be documented and verified?
- How would records of the increase in basis be kept and verified? For example, records would be required to show the cost of improving properties to enhance the selling price.
- Would there be an inflation adjustment?
- How would interfamily transactions be handled?

Under this proposal for a unified property tax, firms in the VAT (developers) would be subject to tax on sales of real property. They would receive a credit for capital gains taxes paid. This suggests that the capital gains tax rate not exceed the VAT rate, so that a level playing field be kept between sales by VAT vendors and sales by all others. This raises a tricky problem, since the capital gains rate should not be lower than the top marginal rate of the individual income tax (which would apply to most other capital gains).

Fourth, a betterment levy or special assessment would be imposed to recapture land value increments resulting from public improvements or from zoning changes. In theory, these increments also would be captured in the annual tax on property and in the capital gains tax. We would argue that the annual property tax is more like a charge for public services, so there is no issue of double taxation. A credit could be allowed against capital gains tax liability. This means that the betterment levy would act as a withholding amount against future capital gains taxes.

A key element of this proposal is a unified administration of property and land taxes. This would have many advantages:

Copyright © 2010, Lincoln Institute of Land Policy. All rights reserved.

- A full property tax roll could be developed, and all records could be brought together. A unique parcel number would be identified, and a physical and legal cadastre could be maintained.
- The valuation of all properties would be brought under one system. A capital value system would be implemented for both urban and rural properties, and valuation techniques would be uniform. The larger agencies would enable development of manuals to guide assessment, sales ratio studies to check on dispersion and regular training for officers. This uniformity in valuation would apply to the annual property tax, the betterment levy and the capital gains tax. This coordination should bring significant economies of scale.
- Significant information sharing would be an important component of this unified administration. Information on valuation, changes in ownership or physical characteristics, and tax payment history for each of the four levies would be integrated.

None of this unified administration precludes heavy involvement in tax rate setting or tax administration by local governments. It does suggest, however, a centralization of the procedures and the information base at the provincial or central level.

REVENUE POTENTIAL

Estimation of the potential base of a unified property is no easy task. First, this requires a judgment about the effective rate of property tax that would be tolerated by taxpayers and economic planners in developing countries, even if the administrative system were in place to produce this result. A rate equivalent to 1 percent of taxable land wealth (about 3 percent of GDP) is feasible. The question raised here is whether this level of property taxation would justify the cost of putting in place and maintaining the necessary administrative system.

Second, this exercise requires an estimate of the value of land and structures. To do this even for a single country would be difficult, because few countries regularly make estimates of their property wealth. However, the World Bank has taken what it calls a “comprehensive snapshot of wealth” for 120 countries in 2000 (World Bank 2006, xiv). They follow economic theory in estimating total wealth as the present value of future consumption and estimate the value of produced capital from historical investment data. From the data in the World Bank study, a measure of wealth can be generated that matches up (conceptually) with the potential property tax base. This measure, which includes the values for cropland, pastureland,

TABLE 6.5 Estimated Tax Base for a Unified Tax on Immovable Property (wealth estimates, 2000, in dollars per capita)

<i>Country</i>	<i>Population (in millions)</i>	<i>Cropland</i>	<i>Pastureland</i>	<i>Urban land and structures</i>	<i>Total land wealth</i>	<i>Total land wealth as a multiple of NDP</i>
United States	282.2	2,752	1,662	76,205.0	80,622	2.29
Canada	30.8	2,829	1,631	51,925.8	56,385	
Spain	40.5	2,806	971	37,865.1	41,642	3.03
Indonesia	206.3	1,245	50	2,282.2	3,577	5.30
India	1,015.9	1,340	192	4,604.4	6,136	13.76
Argentina	35.8	3,632	2,754	18,298.1	24,684	3.20
Chile	15.2	2,443	1,001	10,234.3	13,678	2.86
Hungary	10.0	2,721	1,131	14,822.8	18,674	4.27
Latvia	2.4	1,506	1,877	12,428.8	15,811	4.83
Korea	47.0	1,241	275	30,064.6	31,580	2.91
Mexico	98.0	1,195	721	18,154.5	20,070	3.47
Turkey	67.4	2,270	861	8,215.4	11,346	3.81
Malaysia	23.3	1,369	24	12,512.6	13,905	39.13
Thailand	60.7	2,370	96	7,301.7	9,767	4.91
Pakistan	138.1	549	448	933.6	1,930	

NOTE: NDP=net domestic product.

SOURCE: Completed from data in World Bank (2006).

and urban land and structures, is reported for selected countries in table 6.5. Note, for example, that the sum of these components for the United States is \$80,622 per capita (an amount equivalent to about 230 percent of net domestic product, or NDP). In the case of a more or less representative low-income country (Thailand), property wealth is estimated at \$9,767 per capita (about 490 percent of NDP). The higher ratios of land wealth to total output square with intuition and reiterate the reasons why there is so much resistance to taxing land in developing countries.

The estimates of total wealth from this study are reported by country income groups in table 6.6 (column 3). Note that the per capita stock of wealth in low-income countries is less than 2 percent of that in high-income countries. Note also that the land and structures component of total wealth falls in percent with income level. About one-third of all wealth in low-income countries is in the form of land and structures, but the share is only about half that level in the case of high-income countries.

From these data a rough estimate might be developed of the revenue potential of a unified tax on immovable property. To illustrate, take the

TABLE 6.6 Distribution of Total Wealth: 2000 (per capita amounts in U.S. dollars)

<i>Income group</i>	<i>Farmland, urban land, and structures</i>	<i>Total wealth</i>	<i>Percent share of land and structures</i>
Low-income countries	2,456	7,532	32.6
Middle-income countries	7,110	27,616	25.7
High-income countries	76,522	439,063	17.4
World	18,167	95,860	19.0
<i>Relative levels of country income groups to world average (in percent)</i>			
Low-income countries	13.5	7.8	
Middle-income countries	39.1	28.8	
High-income countries	421.2	458.0	

SOURCE: World Bank (2006).

case of Turkey, which in 2000 raised about \$24 per capita in property tax revenues (about 0.55 percent of NDP). This is equivalent to about 0.2 percent of total land wealth. The levels are roughly comparable for the other developing countries in this sample.

To estimate revenue potential from a unified property tax, let us assume that one-half of cropland and pastureland is subsistence and is not subject to property taxation. Let us further assume that the unified property tax is levied so that the effective property tax rate on land wealth is 1 percent. Under this scenario, the property tax in Turkey would rise from \$24 to \$113 per capita and would increase to 3.8 percent of NDP. This computation is repeated for 10 selected countries, with the results shown in table 6.7. For most low-income countries in the sample, a 1 percent tax on land wealth would increase the effective property tax rate to a level equivalent to more than 3 percent of NDP. In all of these cases, the tax on property would become a significant component of total tax revenues. This is about the same share of GDP that is captured in many industrialized countries (or somewhat higher).

Implications for Administration Costs

As noted earlier, we cannot directly estimate the administrative costs that must be incurred to raise the property tax to this level of revenue yield. What we can do, however, is use these revenue estimates to investigate the possible return to such an investment.

TABLE 6.7 Revenue Potential of Unified Tax on Immovable Property

<i>Country</i>	<i>Actual level of property tax</i>		<i>Potential level of property tax</i>	
	<i>Per capita</i>	<i>Percent of NDP</i>	<i>Per capita</i>	<i>Percent of NDP</i>
United States	1,343.7	3.82	806.2	2.29
Spain	317.0	2.48	416.4	3.03
Argentina	120.7	1.56	246.8	3.20
Chile	34.3	0.41	136.8	2.86
Hungary	37.3	0.24	186.7	4.27
Latvia	29.9	0.56	158.1	4.83
Korea	71.4	0.84	315.8	2.91
Turkey	24.4	0.55	113.4	3.81
Malaysia	14.0	1.50	139.0	3.91
Thailand	6.5	0.01	97.7	4.91

NOTE: NDP=net domestic product.

SOURCE: Computed from World Bank (2006).

Let us consider a more or less generic case of a developing country with a weak property tax administration. To ratchet up the unified property tax to the revenue level envisioned here, the following administrative steps would need to be taken:

- Complete a cadastre for all urban and rural properties in the province (country).
- Determine appropriate billing or ownership information by compiling land registration property ownership records.
- Do a survey of all agricultural properties, determining both land area and crop planted, and put in place a system to update this information.
- Prepare all necessary valuation and collection manuals, and update them regularly.
- Hire and train a cadre of professional valuers and undertake valuation of all properties.
- Set up an infrastructure for administering a capital gains tax on land.

The question is, how much should the government of a developing country be willing to pay for this set of improvements? To explore this question, the following calculations are made:

The net present value (NPV) of the stream of property taxes is computed assuming an effective tax rate equivalent to 1 percent of land wealth. Further, it is assumed that nominal property tax revenues will increase by

TABLE 6.8 Present Value of a Revenue Flow from a 1 Percent Tax on Land Wealth and a Hypothetical Investment in Administration Upgrading

<i>Country</i>	<i>Additional per capita revenue (U.S. dollars)</i>	<i>Per capita cost of a \$100 million investment</i>
United States	1,211	0.35
Spain	625	2.46
Argentina	371	2.79
Chile	205	6.57
Hungry	28,059	10.00
Latvia	23,757	41.66
Korea	47,447	2.12
Turkey	17,073	1.48
Malaysia	20,896	4.29
Thailand	14,685	1.64

10 percent in the first full year to reflect the benefits of upgraded technology and administration. Thereafter, the growth in property tax revenue is assumed to equal the inflation rate (4 percent). The annual cost of revenue collection is assumed to equal 3 percent in all cases. The discount rate is 7 percent—a rate for public programs suggested by the U.S. Congressional Budget Office (CBO).¹⁴

The results from this illustrative case are described in column 2 of table 6.8. Each country witnesses a substantial increase in tax revenue per capita in the case of an upgrading of administration, that is, a substantial difference in the per capita net present value of collections. All of this difference is attributable to administration upgrading. The additional value added ranges from \$205 per capita in Chile to over \$47,000 per capita in Korea. In Chile, for example, the present value of the additional per capita revenues from the combination of administrative upgrading and the increase in the effective rate is \$205. The last column shows the per capita cost of a hypothetical \$100 million investment in administration. The cost-benefit is clear—the administrative upgrading necessary to reach the new 1 percent land wealth system pays for itself many times over.

Would this net return justify the up-front expenditure actually required to put a modern property tax system in place? It is not possible to cost out such a project in general terms because every country is so different.

¹⁴ This computation could be adjusted to phase in the new law or adjust for economies of scale in the development of the administration. For simplicity, assume the increase in revenue associated with the new law and the investment in administrative capacity occur in year 1.

To gain a rough idea, however, consider the description of two World Bank projects:¹⁵

- A \$15 million loan to Slovenia will go toward improving the country's land registration, housing finance, mortgage, and property ownership systems; developing first-time registration of apartments; establishing a market-based property tax; and monitoring agricultural land use.
- The Cadastre Development Project for the Russian Federation aims to improve the information flow and rationalize normative and operational procedures for the Unified State Cadastre of Immovable Property so as to facilitate development of real property markets, improve that quality of services provided by the offices of the Cadastre Agency, and strengthen linkages with other organizations.

The Slovenia project suggests a per capita cost of \$7.50. This compares quite favorably to what might be the present value of the revenue flow from a tax of 1 percent of property wealth.

Administration Efficiencies

Are there reasons, other than the administrative enhancements already described, that might make the unified property tax more administrable? The answer is that the system proposed here has three important features, each of which can make a noticeable difference in the efficiency of property tax administration:

- The elimination of the property transfer tax on immovable property would remove a disincentive to reporting actual sales values. The result should be that valuers would have a reliable database from which to work in estimating market values.
- The introduction of a capital gains tax would put a self-enforcing mechanism in place, that is, buyers would not be willing to allow sellers to understate the transaction value because it would lower their basis and thereby increase their eventual capital gains liability.
- The unification of the property tax would enable administration by a single agency. This would produce economies of scale in valuation, record keeping, surveys, training, and so forth. It also would allow quality improvements by allowing more specialization in administrative assignments.

¹⁵ World Bank Group (2004); World Bank (2005).

REVENUE INCREASES: ADMINISTRATION OR RATE INCREASES?

How would a developing country government move its property tax yield to a level as high as 3 percent of GDP? In the model developed here, the increase comes about because of improved administration (valuation and collection) and an increased tax rate.¹⁶

The basic thesis in this chapter is that the revenue take from the property tax must be large enough to justify the heavy administrative cost involved. The NPV calculations shown earlier suggest that the revenue return from a 1 percent tax on land wealth can pass this test.

Now the question becomes how a country could reach this new revenue plateau, that is, how much would be through improved administration and how much would be through structural changes. A simple model can be used to organize this discussion, based on the theoretical construct developed earlier. As shown, the administrative costs of collection rise as tax revenues increase, but at a decreasing rate. This hypothesized result is caused by improvements in both the collection rate and the assessment ratio that come with increased administrative expenditures. After a certain threshold is reached, administrative improvements become increasingly difficult.

An anecdotal version of the situation is described in figure 6.1, with T_1/T_1' on the y -axis (collection rate) and $a_1(T_1/T_1')$ on the x -axis (cost per unit of collection). Let us assume that the cost of collection per unit of revenue $a_1(T_1/T_1')$ is 5 percent for industrial countries (Almy 2004). Let us also assume a developing country at point A , with lower administrative costs per unit of tax collected (1 percent) and a lower rate of collections against liability. In the example, the country spends only about 1 percent of collections on administration and realizes a collection rate of 50 percent. The path described in figure 6.1 shows that an increase in the running cost of administration to 5 percent of collections would increase collection efficiency T_1/T_1' to 80 percent, which is assumed to be equivalent to industrial country standards. This revenue responsiveness assumes that the same basic systems (e.g., cadastre) are in place in developing and industrialized countries.

The revenue gains from administrative improvement would not be enough to justify the increase in the operating cost of property tax administration and payment for the heavy fixed costs involved (e.g., surveys, cadastre, and computerization). Assume that this would require raising the property tax to a level of about 3 percent of GDP (the industrial country average rate).

¹⁶ An increased tax rate in this model can result from an increase in the nominal rate or a removal of exemptions and preferential treatments.

FIGURE 6.1 Collection Efficiency and Cost per Unit of Collection

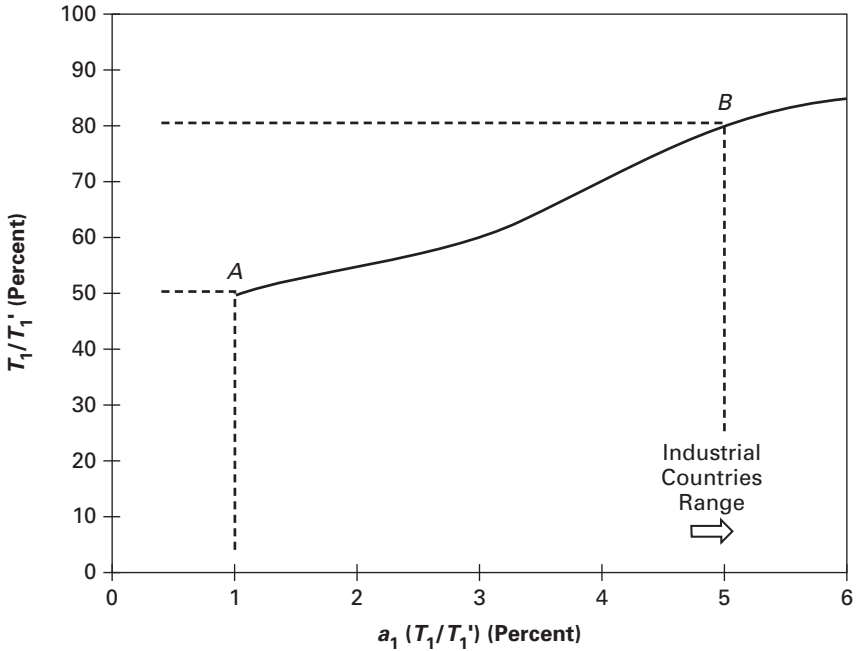


Figure 6.2 shows that the movement from *A* to *B* would raise the ratio of property tax revenue to GDP from 0.6 to 1.8 percent. But to move to an industrialized country level would require reaching 3.0 percent of GDP (point *F*). The question now raised is how much of an effective rate increase is necessary to move from *B* to *F*. To do this, estimate the increase due to administrative improvements as *CB* and the increase due to structural change as *BF*.

To estimate these components, make use of the following identity, which is a straightforward decomposition of the ratio of property tax revenues to GDP:

$$\frac{T_1}{Y} = \left(\frac{T_1}{T_1'}\right) \left(\frac{T_1'}{AV}\right) \left(\frac{AV}{MV}\right) \left(\frac{MV}{Y}\right)$$

where

T_1 = property tax revenue collections

Y = GDP

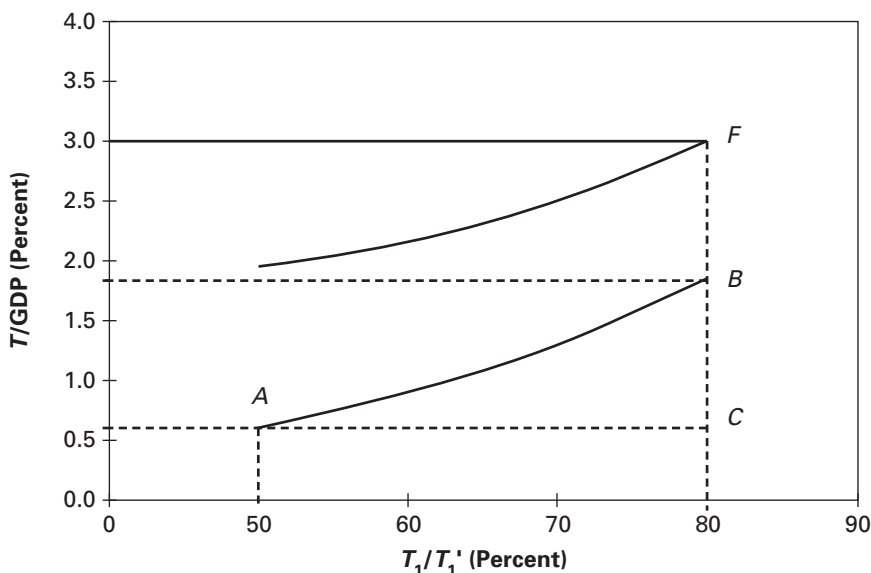
T_1' = property tax liability

AV = taxable assessed value

MV = market value.

Copyright © 2010, Lincoln Institute of Land Policy. All rights reserved.

FIGURE 6.2 Effective Property Tax Rate and Administrative Improvements



The term on the left is the ratio of property tax revenue collections to GDP. It is the level of this ratio that needs to be explained here. The focus is on the components of the tax structure and its implementation, particularly on assessment and collection.

To carry out this estimation, it is necessary to make some assumptions, based on previous work and anecdotal evidence for developing countries.

$T_1/T_1' =$ collection rate (0.5) (Bahl and Martinez-Vazquez 2008)

$T_1'/AV =$ nominal tax rate

$AV/MV =$ assessment ratio (0.5) (Bahl and Martinez-Vazquez 2008)

$MV/Y = 3.8$ (World Bank 2006)

$T_1/Y = 0.6$ (Bahl and Martinez-Vazquez 2008)

Row 1 of table 6.9 uses these assumed values to calculate the implied statutory rate (T_1'/AV) at 0.6. This would be the starting point represented by point A in figure 6.2. If this nominal rate were held constant, but the product of the assessment ratio and the collection rate were increased to 0.81, the ratio of T_1/Y would rise to 1.85, point B in figure 6.2 (and row 2 in table 6.9). What this shows, however, is that the administrative contribution to revenues would be equivalent to 1.25 percent of GDP. This would still fall short of

TABLE 6.9 Simulated Impacts of Alternative Property Tax Administration Reform

<i>Variables</i>	$\frac{T_C}{Y}$	$\frac{T_C}{T_L}$	$\frac{T_L}{AV}$	$\frac{AV}{MV}$	$\frac{MV}{Y}$
Baseline	0.6	0.5	0.6	0.5	3.8
Scenario 1	1.85	0.9	0.6	0.9	3.8
Scenario 2	3.0	0.9	1.0	0.9	3.8

the target of 3 percent of GDP (the industrial country average). To accomplish this (a move from *B* to *F* in figure 6.2) will require a nominal rate increase from 0.6 to 1.0 percent of assessed value, as shown in row 3 of table 6.9.

These results, albeit based on some very general assumptions, suggest that a significant upgrading of the take from the property tax might not be as difficult as most observers would expect. These results suggest that more than one-half the required increase can be had from administrative improvements (i.e., the collection rate and more accurate valuation). While increasing valuations are contentious, they are less so than statutory rate increases and the elimination of existing preferential treatments. And the structural changes require legislative actions, while the administrative improvements do not.

CONCLUSIONS

Property tax revenues in developing countries are stuck at a level below 1 percent of GDP. Reformers and governments grieve about this, and numerous reform efforts have been undertaken. The proposed changes are pretty uniform: deal with the administrative problems of building a cadastre, undertake regular and proper valuation, and ratchet up collection and enforcement. When seen through the eyes of developing country governments, such reforms call for spending a great deal of money to improve administration, without much promise for increased revenue.

This chapter argues that the reform might instead concentrate on redefining the property tax so that its revenue yield might be considerably greater and therefore might justify the kinds of administrative expenditures required to establish a functioning property tax. A unified property tax is proposed here—in structure and administration—that includes four elements: an annual tax on all rural and urban property, a land-based presumptive agricultural income tax, a capital gains tax, and a betterment levy. At an effective rate equivalent to 1 percent of total land wealth, this unified property tax could raise revenues of 3 percent of GDP—a level that would justify the administrative expenditures required.

APPENDIX
TABLE 6A.1 **Alternative Bases for Property Taxation**

<i>Tax base</i>	<i>Major problems</i>	<i>Recommendations</i>	<i>Comments</i>
Annual rental value	No data on comparable rents; courts disallow taxation of vacant property and make rent controls a basis for taxing some residential properties; conceptual problems with taxing commercial and industrial property; property ownership is uncertain, and a full cadastre does not exist.	<ol style="list-style-type: none"> 1. Switch to a capital value or an area-based system. 2. Survey all properties, determine ownership, and build a tax roll. Keep it up to date. 3. Do an annual rent survey, impute a value for owner-occupied properties, Use CV valuation methods and a capitalization rate to assess nonresidential properties. 	<ol style="list-style-type: none"> 1. Would inherit a new set of problems and perhaps not have a revenue effect. 2. The survey and its update would be very expensive. 3. The survey would be expensive. The courts might not accept the imputation.
Capital value of land and improvements	No data on comparable sales; would require assessment of each parcel and require that difference among structures be taken into account.	<ol style="list-style-type: none"> 1. Switch to an area-based or a site-value system. 2. Survey all properties, determine ownership, and build a tax roll. Keep it up to date. 3. Force an accurate reporting of transactions values for sales of properties. 	<ol style="list-style-type: none"> 1. A site-value system would require a higher nominal rate and would have valuation problems. An area-based approach is simpler, but is more notional and less horizontally fair. 2. The survey and its update would be very expensive. 3. This would require a major reform of the property transfer tax.

Site value	How to gather comparable sales values when there are so few sales in urban areas, or how to justify an imputation of land value from sales of properties; gives an impression of showing favor to owners of high-value structures; requires a higher nominal rate.	<ol style="list-style-type: none"> 1. Tax the value of land and structures. 2. Survey all properties, determine ownership, and build a tax roll. Keep it up to date. 3. Valuing land by the residual method requires comparable sales data. 	<ol style="list-style-type: none"> 1. Much more expensive than taxing only the land. 2. The survey and its update would be very expensive. 3. This would require a major reform of the property transfer tax.
Area system	Requires a notional estimate of location values and a method of updating this on a periodic basis; requires a notional assessment manual for building values per square unit; property ownership is uncertain, and a full cadastre does not exist; there is no distinction drawn among individual properties in the same value zone.	<ol style="list-style-type: none"> 1. Adopt one of the three approaches that are based on property values. 2. Survey all properties, determine ownership, and build a tax roll. Keep it up to date. 3. Valuing land to determine location values requires comparable sales data. 	<ol style="list-style-type: none"> 1. All are costly to do. 2. The survey and its update would be very expensive. 3. This would require a major reform of the property transfer tax.

REFERENCES

- Aleksiene, A., and A. Bagdonavicius. 2008. Value-based property taxes in Lithuania. In *Making the property tax work: Experiences in developing and transitional countries*, eds. R. Bahl, J. Martinez-Vazquez, and J. Youngman, 411–435. Cambridge, MA: Lincoln Institute of Land Policy.
- Alm, J., P. Annez, and A. Modi. 2004. Stamp duties in Indian states: A case for reform. World Bank Policy Research Working Paper 3413. Washington, DC: World Bank.
- Almy, R. 2004. IAAO course 402: Property tax policy, section 6: The property tax. Available on request from the author.
- Anderson, K. 2009. *Distortions to agricultural incentives: A global perspective, 1955–2007*. London: Palgrave Macmillan; Washington, DC: World Bank.
- Bahl, R., ed. 1979. *The taxation of urban property in less developed countries*. Madison: University of Wisconsin Press.
- . 2004. Property transfer tax and stamp duty. Jamaica Comprehensive Tax Study Paper No. 2. Atlanta: Andrew Young School of Policy Studies, Georgia State University.
- Bahl, R., M. Cyan, and S. Wallace. 2008. Pakistan: Provincial government taxation. International Studies Program Working Paper 0807. Atlanta: Andrew Young School of Policy Studies, Georgia State University.
- Bahl, R., and J. Martinez-Vazquez. 2008. The property tax in practice. In *Making the property tax work: Experiences in developing and transitional countries*, eds. R. Bahl, J. Martinez-Vazquez, and J. Youngman, 3–16. Cambridge, MA: Lincoln Institute of Land Policy.
- Bahl, R., J. Martinez-Vazquez, and J. Youngman, eds. 2008. *Making the property tax work: Experiences in developing and transitional countries*. Cambridge, MA: Lincoln Institute of Land Policy.
- Bahl, R., G. Sethi, and S. Wallace. 2008. The structure of PRI finances in West Bengal. Kolkata: State of West Bengal, Department of Rural Development.
- Bird, R., and P.-P. Gendron. 2007. *The VAT in developing and transitional countries*. Cambridge: Cambridge University Press.
- Bird, R., and E. Slack, eds. 2004. *International handbook of land and property taxation*. Cheltenham, U.K.: Edward Elgar.
- . 2008. Property tax and rural local finance. In *Making the property tax work: Experiences in developing and transitional countries*, eds. R. Bahl, J. Martinez-Vazquez, and J. Youngman, 103–126. Cambridge, MA: Lincoln Institute of Land Policy.
- Day, P. 2005. Practice reviews. *Urban Policy and Research* 23(2):219–233.
- De Cesare, C. M. 2004. General characteristics of property tax systems in Latin America. Paper presented at the 7th International Conference of the International Property Tax Institute: Optimizing Property Tax Systems in Latin America, Guadalajara, Mexico, September 29–October 1.
- International Monetary Fund. Various years. *Government finance statistics*. Washington, DC: International Monetary Fund.
- International Property Tax Institute. 2007. *Benchmarking 2007: Summary report*. Toronto: International Property Tax Institute.

- Kelly, R. 2000. Designing a property tax strategy for Sub-Saharan Africa: An analytical framework applied to Kenya. *Public Budgeting and Finance* 20(4):36–51.
- Lee, T. I. 2000. Republic of South Korea. In *Land value taxation around the world*, ed. R. Andelson. *American Journal of Economics and Sociology*, supplement to volume 59, chapter 23.
- McCluskey, W. J., and R. C. D. Franzsen. 2001. Land value taxation: A case study approach. Working Paper WP01WM1. Cambridge, MA: Lincoln Institute of Land Policy.
- Mills, E. 1998. The economic consequences of a land tax. In *Land value taxation: Can it and will it work today?* ed. D. Netzer, 31–48. Cambridge, MA: Lincoln Institute of Land Policy.
- Rajaraman, I. 2004. Taxing agriculture in a developing country: A possible approach. In *Taxing the hard to tax*. eds. J. Alm, J. Martinez-Vazquez, and S. Wallace, 242–272. Amsterdam: Elsevier.
- Rao, G., A. Nath, and B. K. Vani. 2004. Fiscal decentralization in Karnataka. In *Fiscal decentralization to rural governments in India*, ed. G. Sethi, 43–106. New Delhi: Oxford University Press.
- Reschovsky, A. 1998. Can the land value tax play an important role in the financing of the state and local governments in the United States? In *Land value taxation: Can it and will it work today?* ed. D. Netzer, 211–246. Cambridge, MA: Lincoln Institute of Land Policy.
- Tsui, S. 2008. Alternative value capture instruments: The case of Taiwan. In *Making the property tax work: Experiences in developing and transitional countries*, eds. R. Bahl, J. Martinez-Vazquez, and J. Youngman, 127–161. Cambridge, MA: Lincoln Institute of Land Policy.
- Urban Unit. 2006. Property taxes in the Punjab, Pakistan. World Bank Infrastructure and Energy Department, South Asia Region and Planning and Development Department, Government of Punjab, Pakistan.
- Wallace, S. 2008. Property taxation in a global economy: Is a capital gains tax on real property a good idea? In *Toward a vision of land in 2015: An international perspective*, eds. G. Cornia and J. Riddell, 47–64. Cambridge, MA: Lincoln Institute of Land Policy.
- World Bank. 2005. Russian Federation—Cadastre Development Project. http://www-wds.worldbank.org/external/default/main?pagePK=64193027&piPK=64187937&theSitePK=523679&menuPK=64187510&searchMenuPK=64187283&theSitePK=523679&entityID=000160016_20050621172157&searchMenuPK=64187283&theSitePK=523679.
- . 2006. *Where is the wealth of nations? Measuring capital for the 21st century*. Washington, DC: World Bank.
- . 2007. *World development report*. Washington, DC: World Bank.
- World Bank Group. 2004. Slovenia—From World Bank borrower to donor. <http://lnweb90.worldbank.org/ECA/eca.nsf/0/8F40611796782AAE85256E5A0054CC6D?OpenDocument>.
- Zhou, Y. 2006. Supporting decentralization in Sierra Leone: Reflections after the first two years of IRCBP implementation. World Bank presentation, May.

Roy Bahl and Sally Wallace, two of the most accomplished U.S. public finance economists, have produced a chapter that on the first read may seem pedestrian, even though the chapter's title offers a new paradigm for local taxation. It might seem like a modest chapter because they do not recommend the adoption of radically new taxes—new taxes being what you would expect with a paradigm shift. In fact, every tax they discuss in the chapter is applied in some form in many countries, and the academic literature they refer to is familiar to most people who think about, write about, and eventually recommend tax policy. Nevertheless, this is a chapter that should be dissected by public finance colleagues who have made careers recommending the paths that countries should follow toward tax reform. If the ideas in this chapter were adopted, a paradigm shift could occur because the property tax might actually produce revenue in developing countries.

There is an unfortunate history of property tax in developing countries and thus a need to explore the topics in this chapter. The efforts to fund local governments by relying on the property tax in developing countries have been disappointing. Bahl and Wallace make the case for a new paradigm by reminding the reader of the paltry revenue that the property tax generates in relation to the gross domestic product (GDP) of most developing countries. This outcome is especially unfortunate given the high marks the property tax receives in terms of economic efficiency and land use outcomes. Finding a shining star of property tax success from a developing country is difficult. There have been property tax successes, but they are geographically limited within a country and often directed by a leader possessing missionary zeal around the property tax. Even in countries where success was achieved, the ensuing years usually seriously erode the initial achievements.

There are many fundamental reasons why the property tax has not been as productive in developing countries as in developed parts of the world. The policy leadership skills that create missionary zeal toward the property tax are hard to replicate in traditional university training situations. Faculty with skills like Bahl and Wallace can convince others of the fundamental superiority of the property tax in public finance training courses, but helping students convince the world of the advantages of the

property tax has proven elusive. The policy wonks may understand the advantages of the property tax, but communicating those advantages is very hard. The political costs associated with the property tax are also very high. Politicians are likely never to campaign on a promise that, if elected, they will increase the property tax. Just the opposite happens: Politicians often promise that, if elected, they will reduce the property tax. In addition, if the elected officials do not actually reduce the property tax, they ignore it, which leads eventually to a property tax that is so poorly administered it creates even further dislike of the property tax.

Bahl and Wallace note a number of administrative shortcomings associated with the property tax. These shortcomings do not need to be repeated here, but two concerns that confront the property tax will be mentioned. First, in developing countries, there is a critical shortage of the trained managerial and technical professionals necessary to lead and manage a property tax agency. Very few countries have developed educational mechanisms that lead to a career in property tax policy and administration. Except for some European countries, it is difficult to even find a university in the developed world that trains property tax administrators. In the property tax arena, tax professionals have traditionally developed skills on the job. This model worked when the economy was agrarian, and changes in ownership and values were slow and generally predictable. Individuals could become experts in the real estate world and the property tax world by just hanging around. This model will not work today, because there is too much change, and the requirements to understand property value change are increasing rapidly and doing so at an increasing rate. Valuations of complex properties for property tax purposes are among the most complex cases that courts face in the developed world.

Administratively, the challenges to the property tax have proven to be vexing at best and perhaps intractable. Those trained to understand the property tax can never acquire and control sufficient resources to administer the property tax properly, and, as noted, those elected to make policy can never find the courage to fund the process that might lead to an increase in an unpopular tax. An unpopular tax becomes even more unpopular because of the resulting nonuniform administration.

The second challenge to the property tax in developing countries is collecting and reporting data on actual market transactions. The quality of the property tax in every country is dependent on the ability of the taxing authorities to have access to the details of the majority of the real estate transactions that occur. Without this information, attempts to develop and maintain a property tax will fall short, as described by the data in the Bahl and Wallace chapter.

There have been attempts by outside experts employed in developing countries to supplement the lack of data on market transactions. These attempts illustrate how important it is to think carefully about the suggestions of Bahl and Wallace. The efforts at tax reform have tried to overcome the lack of administrative expertise and managerial skills by the implementation of shortcuts that glossed over the fundamental administrative issues. For example, it has been common to use statistical modeling to estimate the taxable value of unsold properties in developing countries. The term for this type of analysis is computer-assisted mass appraisal (CAMA). CAMA has succeeded in a number of developed city-states such as Hong Kong and Singapore and countries such as Canada, the United Kingdom, and the United States. CAMA has not been as successful in developing countries. The problem has been treating the symptom of a lack of market transaction data rather than the fundamental problem of inadequate data-gathering techniques. The application of modeling based on inadequate data has done little to advance the property tax. Much was promised but in the end was not delivered by groups trying to apply such models in developing countries. Thus, the suggestion of Bahl and Wallace for a more fundamental approach to tax reform offers the promise to treat the problem, not the symptoms.

The collection of data on market transactions will also only improve as the financial industry plays a larger role in funding residential and commercial facilities. In many developing countries, the process of borrowing funds for home construction or purchase remains very informal with only modest transparency. The result is little private market incentive to collect and report data.

Given such shortcomings, Bahl and Wallace suggest that developing countries should redirect their reform efforts away from the traditional approach of transforming just the property tax. They do not recommend the abandonment of the property tax, but rather suggest that policy makers need to recognize that under current conditions reform efforts will result in little change in collected revenue. The primary reason for their recommendations is that unless the revenue potential of the property tax is increased, administrative reform efforts will increase costs, but not result in significantly more revenue. That is, current reform efforts make government more expensive to operate, but not more efficient at collecting funds. The administrative and political costs of reform are high, but the increase in revenue is modest. Any rational person would reject the cost benefit where costs are high and benefits are low. Their suggestion is that all property-related taxes be combined into a single tax with a single administrative unit that is responsible for the

administration and revenue collections associated with taxes on real and improved property.

Their suggested consolidation will not be reviewed here; that is left to the reader. The most significant suggestion they offer is the recommendation that all administrative efforts associated with taxes on property be consolidated into one single administrative unit. In most developing countries, taxes imposed on property are not only administered in different offices, but they are often administered at different levels of the government. For example, a transfer tax may be imposed by one unit of the central government, and an ad valorem property tax administered by a different unit within the central government or an administrative unit in the provincial or even local level of government. The complexity of property tax administration goes beyond revenue departments. A functioning property tax requires that land records are complete and kept up to date. Once again, the development and maintenance of land records is not a centralized or even a uniform function in developing and even developed countries. The lack of uniform administrative policy for land records in a developed country is a challenge. This same problem becomes a critical fault in developing countries. Bahl and Wallace suggest that any type of tax based on real and improved property must have adequate data to facilitate a uniform process of application.

They also suggest that some taxes now applied to property be reconsidered. The most notable one is the tax imposed on the transactions associated with property sales. Under current practice, it is common to find tax rates in excess of 5 percent on the reported sales price of residential and business property. In some developing countries, taxes on transactions have been in the double-digit range. No one should be surprised that such rates cause buyers and sellers to understate the purchase price to avoid the tax. The problem of misrepresenting the sales price is so strong that many countries apply an administered price to each transaction. It is safe to assume that there is a loss of revenue from such situations. However, the loss of revenue from underreporting is almost insignificant when compared to the loss of sales data that could be used to develop uniformity in the application of the property tax.

Perhaps the most important contribution of the Bahl and Wallace chapter is their calculation of the revenue potential that is associated with the property tax base if administrative and organizational reforms were adopted. Adopting their modest and realistic suggestions for administrative realignment around the property tax should result in revenue that would be worth the effort of reform. They demonstrate the revenue potential by

applying conservative assumptions around the increased compliance associated with their suggested reforms. If their suggestions are adopted, developing countries might be able to benefit from the property tax in terms of revenue and contribute to the goal of fiscal decentralization. If that were to happen, it would indeed be a paradigm shift.