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PROPERTY TAX IN ASIA

Policy and Practice



Edited by

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Current Policies and Practices

ROY BAHL, WILLIAM MCCLUSKEY, AND RIËL FRANZSEN

Asian jurisdictions tax real property in many different ways: some tax ownership and some land use; some tax land and some land and buildings; and some have no property tax. These broad differences in what they tax lead to important differences in how they tax real property: how they value property, what they do not tax, and how they go about their collections.

Each chapter in part 2 examines an individual jurisdiction. This chapter compares practices in all 13 jurisdictions with good practices in property taxation to suggest the best way forward. It begins with a review and analysis of how these jurisdictions have structured their property tax bases and rates to mobilize revenues. Most have gone to great lengths to reduce the burden on property taxpayers. The chapter then describes the development of the fiscal cadastre—those factors required for implementation of a property tax system. Here, valuation, billing, collection, and enforcement are compared and discussed in some detail. We also take up the subject of taxes on property transfers and discuss why this has long been a missing link in achieving the goals of better property taxation. The chapter closes with a discussion of how jurisdictions and territories in Asia have attempted to use land and property taxes to influence the distribution of tax burdens and the efficiency of land use.

This chapter draws heavily from the case studies in part 2 of this book.

Recurrent Land and Property Tax Structures

Recurrent property taxes should not penalize those who use property in different ways. Special features that narrow the tax base, such as exemptions or preferential rates, should have well-justified equity or resource-allocation objectives or be prompted by administrative considerations. The tax rate should be set at a level that will raise a targeted amount of revenue, and the approach to property valuation should be in step with the legal base of the tax. Administration should be efficient, keep costs reasonable, and be transparent. Collections of tax liabilities should be strictly enforced. The tax laws should be understandable, the structure should be as simple as possible, and the results should be regularly reported to the public.

In the real world, however, property tax structures always miss these norms, and in some jurisdictions, they miss them by a lot. In part, this is because the taxation of land and property is complex, the political economy has led to some unfortunate tax structure choices, and management practices have been lax. Of course, bad practices can be fixed, but as our case studies show, some fixes have been less effective than others, especially in poorer jurisdictions.

Property taxation in Asia is heavily influenced by traditions and laws regarding property rights and by land use, land tenure, topography, and government structure. Jurisdictions' efforts to reform their property tax are constrained by tight budgets, limited resource capacity, and low taxpayer morale. In general, the richer jurisdictions have more success than the poorer ones.

What Determines Revenue Mobilization?

To evaluate the likely impacts of property tax reform, we view the property tax as a system. The government levying the tax often controls four parts of the property tax system: the statutory tax rate, exemptions and preferential treatments, assessments, and collections.¹ These four components are linked, and all must be considered when evaluating the revenue impact of any single discretionary change in the tax system. Box 2.1 presents a systematic approach for examining the relationship between discretionary changes in property tax structure and property tax revenue.

Tax Base

The recurrent property tax is a family of levies on the holdings of real property or on user rights to real property. It is levied on some measure of value, or in some cases, on physical area. Value-based approaches are generally considered better than area-based approaches, in part because

Box 2.1 THE PROPERTY TAX REVENUE IDENTITY

Property tax analysts use a simple identity to explain and estimate the impact of discretionary changes in property tax structure and administration on the level of property tax revenues (Bahl and Linn 1992, 102; Kelly, White, and Anand 2020):

$$PT/GDP = (PT/PTL) (PTL/TAV) (TAV/AV) (AV/MV) (MV/GDP),$$

where

PT = property tax revenue collections

GDP = gross domestic product

PTL = property tax liability

TAV = taxable assessed value

AV = total assessed value

MV = market value of real property.

The first term on the right-hand side of the identity is the collection rate, the second is the statutory tax rate, the third is the percentage of assessed value of property that is taxable, and the fourth is the rate at which the market value of property is assessed. These are the variables over which many jurisdictions have some degree of control in their efforts to influence revenue yield. The fifth term is the magnitude of the market value of real property, which is usually assumed to be constant in the short run. This identity can be used to simulate the revenue impacts of property tax policy or administrative changes made by governments. All the discretionary measures are important in estimating the revenue impact of changing any one of these. For example, revaluation may affect the assessment ratio (AV/MV), but the revenue impact will be substantially lessened if the collection rate or the statutory rate is low.

the value of a property better reflects the benefits received from the services it finances (Bahl and Bird 2018; Franzsen and McCluskey 2017; Kelly 2014; Kelly, White, and Anand 2020; McCluskey, Bell, and Lim 2010). Property values are driven by supply and demand, by the capitalization of the value of local infrastructure (such as roads, sewers, storm-water drainage, and street lighting), and by the benefits from local-government services (such as public schools, fire stations, police stations, and parks). A value-driven approach also provides the potential for a buoyant tax base (i.e., tax revenue moves up or down with GDP), whereas area-based systems tend to be static unless regularly adjusted with value-approximation coefficients.

Area-based systems can have great benefits in property tax regimes because they can be imposed in jurisdictions where there is only a fledgling property market, and they can get around the shortage of qualified valuers because limited individual valuation is required. In effect, each property is assigned to a value zone, and each value zone is assigned a tax rate. Revenues grow by changing the zone that properties are assigned to, by changing the tax rate, or by receiving new properties on the tax roll. In fact, area-based systems have long been used, especially in rural areas and in transition jurisdictions (Bahl and Bird 2018; Bing, Connelly, and Bell 2009; Rao 2008).

The jurisdictions analyzed in part 2 use value-based systems and assess either the annual rental value (the amount a tenant and landlord could agree on in an open market) or the capital value (the amount a willing buyer and seller could agree on). More than one recurrent property tax is in force in Korea, and Malaysia has more than one tax base option to choose from. Moreover, within any one jurisdiction, different types of property may be treated differently in terms of how they are assessed. For example, urban property may be value based, but rural property may be assessed according to land area. The range of tax-base choices made by the 13 jurisdictions covered in part 2 of this book include (1) capital value of land and improvements, valued as a unit (Japan, Malaysia, and Thailand); (2) capital value of land and improvements valued separately (Indonesia, Korea, Philippines, Taiwan, and Thailand); (3) annual rental value (Hong Kong, Malaysia, Pakistan, and Singapore); (4) land value (Taiwan, Thailand, and Vietnam); (5) building value (Taiwan and Pakistan); and size of the property (China, Malaysia, and India).

Table 2.1 describes the diversity of the tax bases by providing more information about what is taxed in each of the 13 case study jurisdictions.

In the first years of the 2000s, some Indian cities, including Delhi, replaced their annual rental value systems² with unit-area value systems, which are based on the physical area of the property. This was a pragmatic alternative meant to compensate for the lack of good data on market values.³ However, the factors used to convert physical-area measurements to a property tax liability must be reviewed and adjusted periodically if revenues from an area-based system are to be buoyant and the distribution of property tax burdens is to remain fair (Ahmad, Brosio, and Jiménez 2019). Such adjustments to the base have not taken place in all the Indian cities that have implemented a unit-area value system. In Delhi, for example, taxable property values have not been adjusted for more than a decade.

In addition to deciding whether to tax value or area, governments can broaden or narrow their tax base by treating land and improvements differently, introducing a separate wealth tax on real property, or singling out

Table 2.1 Recurrent Property Taxes and Tax Bases, by Jurisdiction

Jurisdiction	Taxpayer	Recurrent Tax	Tax Base	Comment
China	User	Urban and township land use tax	Land area in commercial use	Private residential use is excluded.
	Owner of building	Real estate tax	Housing and buildings used for commercial purposes	Private residential use is excluded.
Hong Kong	Occupier	Rates*	Annual rental value	Valuations are based on rental records and other data and use computer-assisted mass appraisal.
	Owner	Property tax on rented properties	Annual rental value	
India (Delhi)	Owner	Rates*	Unit-area value in Delhi	Until 2004, annual rental values were used as tax base.
Indonesia	Owner	Urban and rural land and building tax	Capital value of land and buildings	Both forms of recurrent property taxes were devolved to local governments in 2011.
		Property tax on forests, plantations, and mining operations	Capital value of land and buildings	
Japan	Owner	Fixed asset tax	Assessed value	Only 647 of 1,719 municipalities (about 38%) levy this tax.
		City planning tax	Assessed value	
Korea	Owner	Local property tax	Capital value of land and improvements	This is a central tax, but revenue is shared among local governments.
	Owner	Gross real estate tax	Capital value of total nationwide real estate holdings	

(continued)

Table 2.1 Recurrent Property Taxes and Tax Bases, by Jurisdiction (*continued*)

Jurisdiction	Taxpayer	Recurrent Tax	Tax Base	Comment
Malaysia	Owner or tenant	Quit rent	Fixed amount per square meter	Tax differentiates on the basis of location and property use (residential, industrial, or commercial); it also varies by state. Only 20 local authorities use improved value; 134 use annual value.
	Owner	Property tax	Annual rental value or improved value	
Pakistan	Owner	Urban immovable property tax	Annual value	Provincial laws govern the tax.
Philippines	Owner	Real property tax	Assessed value	Tax is viewed by many as a land policy tool as much as a revenue source.
	Owner	Special education tax	Assessed value	
	Owner	Idle land tax	Assessed value	
Singapore	Owner	Property tax	Annual rental value	Tax is payable by owner.
Taiwan	Owner	Land value tax	Capital value of the land	Tax is based on all holdings within a local jurisdiction. Up to three buildings by an owner are entitled to a preferential rate for owner occupancy. Idle land is vacant plots or where building value is less than 10% of land value.
	Owner	Building tax	Capital value of the building	
	Owner	Idle land tax	Land value	
Thailand	Owner	Land and building tax	Capital value of land and buildings	A new property tax regime was put in place in January 2020 and is still in a transition period.
Vietnam	Owner	Nonagricultural land use tax	Land price indexes	Tax rates depend on use. About 75% of residential taxpayers are exempt. Different tax rates apply to different land categories.
		Agricultural land use tax	Land area	

Source: Case studies in part 2 of this book.

* Rates refers to the local property tax in former Commonwealth jurisdictions and regions.

certain types of property for special treatment. Each of these base enhancements is directed at a particular objective. But some could have less desirable impacts and could lead to more complication of the recurrent property tax and to higher administrative costs.

There has long been worldwide interest in taxing land more heavily than improvements in order to better capture the efficiency gains from taxing an immobile factor at a higher rate. The rationale for using a land value tax or a split-rate tax with a lower rate on buildings than land—as in Taiwan—is in step with the goals of encouraging property development (Dye and England 2009; Franzsen 2009; Netzer 1998; Youngman 2016). William Vickrey, a Nobel laureate in economics, stated, “The property tax is, economically speaking, a combination of one of the worst taxes—that part levied on real estate improvements . . . and one of the best taxes—the tax on land or site value” (Dye and England 2009, 3). To realize the benefits of this strategy, the tax rate differential must be great enough to induce enough new development to offset the economic costs of implementing the split-rate system. The cost of valuation is high because credible and defensible values must be determined for both the land and the building components (Franzsen and McCluskey 2013).

A split-rate system is only one approach to taxing land more heavily than buildings. Under Vietnam’s recurrent property tax system, only the land is taxed. The situation is similar in China with respect to residential properties. In contrast, Pakistan levies a higher tax on buildings (covered areas) than land, implying a disincentive for development. In Japan, property taxes on buildings raise about 10 percent more revenue than do taxes on land.

In one sense, all recurrent property tax systems are a tax on wealth. But some Asian jurisdictions have carried this one step further. Korea’s annual gross real estate tax, levied by the central government, uses a property owner’s total countrywide real estate holdings to arrive at a tax liability. The stated purpose of the tax is to deconcentrate the distribution of land ownership, but it covers only about 2 percent of real estate landholders. Vietnam’s nonagricultural land tax also applies to a taxpayer’s separate landholdings, and Taiwan requires the aggregation of all landholdings in the local jurisdiction before the progressive rate structure is applied. Other jurisdictions have tried to tax real property wealth by imposing separate taxes on high-value holdings. In 2014, Pakistan’s Punjab Province introduced an additional one-time tax on luxury residential property; and Indonesia imposed a one-time sales tax of 20 percent on luxury houses, apartments, and condominiums worth more than INR 30 billion (about USD 2.1 million).

Certain types of property have been singled out for special treatment under the recurrent property tax. Vacant or underused land is often a target, with a goal of either gaining revenue or encouraging better land use (Taiwan and the Philippines are examples). But the tax is often not levied at a high enough rate to matter, and moreover, the administration can be problematic. Another example of special treatment is extending the tax base to assets other than land and buildings. For example, in Japan, Hong Kong, Thailand, and the Philippines, certain types of plant and machinery are included. With the exception of Japan, these types of property taxes do not generate much revenue.

Tax Relief

A major contributor to the low revenue productivity of the property tax in Asia is tax relief programs. This is surprising in light of the low amount of revenues raised from property taxes, especially in the low-income jurisdictions of Asia. Depending on the program, the tax relief is often justified as protecting low-income families, encouraging home ownership, encouraging better land use patterns, or stimulating economic development (Bahl and Bird 2018, chap. 6). But the property tax is wildly unpopular with voters, leading to tax relief enhancement proposals from politicians seeking votes or even bending to powerful lobbies (Rosengard 2012). Whatever the reason, studies of property tax reform usually call for scrutiny of tax relief programs and for a full accounting of the resulting tax expenditures (ADB 2020; Kelly, White, and Anand 2020).

Tax relief programs are part of every jurisdiction's system and not easily dislodged once in place. The benefits of tax relief are not often compared with their costs, and in fact, most jurisdictions do not even monitor their effects, much less track the amount of tax revenue given up.⁴ Still, Asian jurisdictions continue to give tax relief in many ways. Sometimes this is highly visible to taxpayers, such as a reduction in the tax rate for preferred properties or an outright exemption. In other cases, it is almost invisible to taxpayers because it is hidden in complicated valuation rules.

Exclusions, Exemptions, and Thresholds

Every property tax system provides exclusions and exemptions. The accepted practice in most jurisdictions is full exemption from property tax for places used for public worship or charitable purposes and for most government purposes. Others can be more controversial, particularly when they are costly to government revenue budgets. To be sure, some are well meant, such as recognition of the positive externalities generated by some

exempt properties (Kelly 2014). However, many others are traceable to political rationales.

Value thresholds are a simple way to provide relief for low-income families and to lighten administrative workloads. The danger is that the threshold may be set so high that it excludes much of the tax base. The threshold of Korea's tax on land wealth is so high that it excludes a large share of real estate owners, and so it cannot easily succeed with its objective of deconcentrating the ownership of land. Thailand's new tax regime also uses a high tax threshold to exempt most owner-occupied properties from the tax base, making it regressive and greatly limiting its revenue productivity. On the other hand, high thresholds can be consistent with government policy. By establishing a high exemption level, Singapore effectively excludes most owner-occupiers living in subsidized public housing—consistent with the country's policy of taxing wealth and encouraging owner occupancy. It should also be noted that the management of thresholds can require maintenance, and in particular, revaluations usually require a periodic reset.

Some Asian jurisdictions track their use of exemptions, presumably to control revenue loss. In Hong Kong, for instance, properties are closely monitored to confirm their exempt status. In 2018, less than 2 percent of total assessments on the valuation list were exempt from rates payment. In Vietnam, the revenue forgone from exemptions from the nonagricultural land use tax was estimated to account for 10 to 11 percent of total revenue collected from 2012 to 2016. In most jurisdictions, however, the cost of property tax relief is not tracked.

Rate Capping, Rebates, and Discounts

Rate capping, revenue capping, and phase-in provisions provide tax relief when sticker shock causes problems—for example, with the introduction of a new valuation roll. Japan moderated increases in tax burdens in cities and metropolitan areas by capping the increase in assessed values. In Malaysia, the revaluation in 2014 was accompanied by a cap on the tax increase. The Hong Kong region has introduced a rates concession scheme to cushion the short-term impact of increases in property tax payments while preserving the long-term fairness and integrity of its rating system. Thailand's new property tax law provides for soft transition measures, phasing in the new tax over a three-year period.

A rebate or partial exemption of property tax liability is a further option for granting relief. Some rebates are given in consideration of poor public services, such as Hong Kong providing tax reductions for properties with unfiltered or no water supply. In other cases, tax rebates have been used to encourage socially desirable actions. For example, to increase the

supply of more durable residential construction or to remodel homes for elderly residents, Japan offers a tax rebate of 50 percent over five years for qualifying houses. In Vietnam, certain types of land and categories of taxpayers are eligible for a 50 percent tax reduction for investment projects in regions experiencing socioeconomic difficulties. In Hong Kong, the Rating Ordinance provides for one-time rebates and concessions in times of economic difficulty, such as in 2003 when Hong Kong was affected by the outbreak of SARS (severe acute respiratory syndrome).

Discounts for early payment lower tax burdens and also provide benefits to the taxing government. In Punjab, Pakistan, taxpayers who pay the full amount of tax before a specified date are entitled to a 5 percent discount. The law in the Philippines allows for advance payment incentives of up to 20 percent.

Valuation and Assessment Adjustments

Tax relief in Asia is also given by applying different valuation methods to different types of property or by reducing the assessed values of certain types of properties. Formal fractional assessments are not uncommon. For example, in Khyber Pakhtunkhwa, Pakistan, offices of the local and federal governments, nongovernmental organizations, private commercial organizations, guesthouses, hostels, and banks are taxed at only 20 percent of the assessed annual rental value. Korea and the Philippines also take this route. Hong Kong (and many other jurisdictions) deducts a statutory percentage from (gross) rental value to determine net annual value.

Tax Deferrals and Amnesties

Tax deferrals are a practical way to address the asset-rich, cash-poor dilemma—a phenomenon often encountered with retired residential property owners. This occurs when property values and property taxes rise faster than incomes. Careful design of such relief programs is important; if too many taxpayers qualify for deferral, government cash flow may see a significant, negative impact. Moreover, properly managed tax deferral schemes require a certain level of administrative machinery, which imposes a cost. Deferrals are especially problematic in jurisdictions with rapidly aging populations, such as Japan.

Amnesties can provide significant one-time revenue collections of back taxes, but they also have significant drawbacks. Drawing delinquents back into the system with an amnesty does not guarantee that they will remain in the system; moreover, compliance by other taxpayers may fall. Multiple amnesties may create a disincentive for compliance when they lead to an expectation of future forgiveness of taxes, penalties, or interest.

In the Philippines, 56 local governments in highly urbanized regions with high-value real properties granted amnesties to taxpayers in the first two decades of this century. These amnesty programs yielded an estimated aggregate revenue of about USD 564.5 million, or about half the average annual national property tax revenues raised in the Philippines in 2014–2018.

Special Cases of Tax Relief

Three special cases of tax relief are worth noting because of their importance and widespread use. These are the exemption of government property, the preferential treatment of owner-occupied property, and special provisions for property taxation during the COVID-19 pandemic.

EXEMPTION OF GOVERNMENT-OWNED PROPERTY

The tax exemption of government-owned property is often fixed in the central property tax laws. As a result, most jurisdictions do not tax properties that are dedicated to government use. Korean law exempts real estate owned by the government and lands used for public utilities, whereas in the Philippines properties owned by any level of government, and registered cooperatives, are exempt.

Exempting property owned (or used) by higher levels of government can be especially burdensome for the underlying local governments. This is surely the case in capital cities (McCluskey and Franzsen 2013; McCluskey, Franzsen, and Bahl 2017b), where government-owned real estate may constitute a significant part of the potential local tax base. Moreover, these properties require municipal services and benefit from local infrastructure, and if exempt, they force reliance on cross subsidies or other revenue sources.

PREFERENTIAL TREATMENT OF OWNER-OCCUPIED RESIDENTIAL PROPERTY

Most Asian jurisdictions extend preferential treatment to owner-occupied residential properties under the recurrent property tax (Bird and Slack 2004; Kelly 2014; McCluskey, Franzsen, and Bahl 2017b). This happens in China, Malaysia, Taiwan, Thailand, and the Philippines (where lower rates are used in combination with lower assessment levels).

The international experience, generally, and the experience in most of the jurisdictions studied here, is that preferential treatment of owner-occupiers can lead to a large reduction of the tax base. As an extreme example, China excludes all residential properties from the real estate tax—although these properties appear to be formally included in the tax base. In Vietnam, certain residential land within regions with extreme socioeconomic difficulties and land that is used by poor households are exempt. In India and Pakistan, lower tax rates apply to primary residences. The

tendency to apply lower rates for owner occupancy generally might be ascribed to political reasons. In Thailand, it was seen as almost a necessary condition for passing the new property tax law in 2020.

SPECIAL CORONAVIRUS PANDEMIC RELIEF

The fiscal impact of the coronavirus pandemic is considerable. One estimate places the resulting GDP decline at about 4 percent and for the emerging economies an increase in fiscal deficits equivalent to 2.8 percent of GDP (Oxford Economics and ITIC 2020). The International Monetary Fund (IMF 2021) estimates that bringing debt back to pre-COVID-19 levels will require significant increases in the primary surplus—that is, tax increases.

Governments across Asia, like those elsewhere, have attempted to cushion the impacts with ad hoc and formal measures. The property tax has been one of the fiscal instruments used. One form of property tax relief has been to defer property tax payments and waive penalties. In Indonesia, the city of Jakarta decided not to increase the property tax for the year 2020 and continued previous policies of forgiving administrative fines for late payments. In the Philippines, local governments may reduce the real property tax partially or fully after a calamity. Local assessors are also mandated by law to reassess real properties if sudden inflation or deflation of property values occurs or in any abnormal circumstances. In Taiwan, businesses that closed, such as restaurants and hotels, are entitled to a preferential housing tax rate.

Asian jurisdictions will be challenged to put their preexisting fiscal administrative arrangements back in place once the pandemic is under control (IMF 2020). The tax compliance machinery in governments, as well as in many businesses, is in disarray; borrowing rules have been bent; and earmarked funds have been raided. The property tax will be particularly difficult to restore as temporary preferential treatments are rescinded and the issue of establishing a new valuation roll is taken up. In many places, it will be a long road back.

Statutory Tax Rates

The most straightforward way to provide property tax relief is to reduce the statutory tax rate (see box 2.2). It is easy enough to structure and to target particular kinds of property. In Asia, rate differentiations are based on the location of a property (China and the Philippines), value (Indonesia), use (Malaysia and Vietnam), nature of occupation (whether owned or tenanted; e.g., India), or a combination of these factors and size (Pakistan). There also are drawbacks. Rate increases are the most visible discretionary

Box 2.2 STATUTORY TAX RATES AND EFFECTIVE TAX RATES

It is important to distinguish between the *statutory tax rate* (also called the nominal rate) and the *effective tax rate*. The former, a legal concept, refers to the tax rate specified in the law to be applied to the taxable base. The effective tax rate is an economic concept, and it must be calculated. The numerator is the total amount of property tax collected against current-year liability; and the denominator may be GDP, for a national effective rate, or the market value of the property, for a local effective rate. The effective tax rate reflects the combined revenue impact of the statutory rate structure, the collection rate, the accuracy of assessments, and preferential treatments. See also the discussion in box 2.1 and Kelly, White, and Anand (2020, 168–169).

Example

Property market value	\$1,000,000
Assessed value	\$900,000
Statutory tax rate	1.5%
Initial tax amount	\$13,500
10% rebate	\$1,350
Tax amount	\$12,150
Effective tax rate	1.215% (= \$12,150 ÷ \$1,000,000)

This example highlights only the effect of a lower assessed value and tax relief. Kelly, White, and Anand (2020, 168–169) provide further actual and illustrative examples.

change and can serve as a flash point for taxpayer discontent. Later, we use the information from the 13 case studies as a context for discussing four critical questions related to rate setting and design.

How Are Statutory Tax Rates Determined?

The main determinants of statutory tax rates are the size of the taxable base, the revenue required for the budget, the availability of other revenue sources, government policy priorities, and politics. In theory, statutory rates may change every year, depending on any or all of these factors, but in practice, they do not change frequently. Political leaders shun tax rate increases, particularly if they are large one-time increases; and often would prefer changing fractional assessments, changing the exemption list, or even revaluing part of the property tax base.

Who Sets Rates?

In Asian jurisdictions, there are all sorts of arrangements for determining tax rates. In some fiscally decentralized jurisdictions, locally elected councils set tax rates. This is the case in Malaysia. However, in much of Asia, setting rates tends to be a responsibility of the central government because most property taxes are central-government levies (or state or provincial levies). For example, in Korea, both the local property tax and the gross real estate tax are legislated centrally, with only minor rate adjustment power left to local governments. The situation is similar in Taiwan.

But limited rate-setting autonomy at the local-government level does not mean that subnational governments have no control over rate structures and revenues. For example, the minimum and maximum rates for the urban and township land use tax in China are set centrally on the basis of city size and occupied land area. Local governments, however, determine the exact rates on the basis of local needs and affordability. In federal systems, recurrent property taxes may be devolved or retained by the state or provincial governments (as in India and Pakistan, respectively). Malaysia's property tax is levied under state government law, yet rates are determined locally. Even in jurisdictions where the tax rate may be set at the local-government level, a higher level of government may stipulate maxima and minima or simply a standard rate (Japan, Philippines, Thailand, and Indonesia).

What Are the Options for Rate Structure and Design?

Tax rate structures differ widely across Asia. This is because they have evolved over time in response to different pressures for relief, special preferences, social engineering, and revenues. A central issue in Asia is whether complicated rate structures are worth the difficulties that they bring to administering the property tax.

TAX RATES

Some jurisdictions apply a uniform tax rate countrywide to certain types of properties. Because Hong Kong annually revalues all taxable properties, its uniform 5 percent tax rate on annual rental value has stayed in place since 1999. Singapore also revalues annually, and its uniform 10 percent rate for nonresidential property has remained unchanged since 2001. The appeal of a uniform rate tax is its simplicity, the ease of making discretionary adjustments, and that revenue increases are mostly tied to tax-base increases. In Indonesia, local governments may set the rate structure within a national maximum of 0.3 percent. The annual rental value

and therefore the statutory tax rates can differ within and among provinces in Pakistan.

A number of Asian jurisdictions use a progressive rate schedule, meaning that the statutory rate increases as the assessed property value increases. The general idea is that those with more real property wealth ought to be taxed at a higher rate, and the degree of rate progression is always a subjective decision.⁵ Although some higher-income jurisdictions (Korea and Taiwan) impose progressive rate structures, they are more common in the lower-income jurisdictions. A distinguishing feature of a progressive rate schedule is that revenue increases are driven by both growth in assessed values and bracket creep.⁶

A problem with progressive tax rate structures is that they complicate the property tax. Korea uses a number of different progressive rate structures for its local property tax. For commercial building sites, progressive rates range from 0.2 percent to 0.4 percent. For so-called speculative land, the range is slightly higher: 0.2 percent to 0.5 percent. For other types of land, different uniform tax rates are applied to specific use categories. Korea's wealth tax (its annual gross real estate tax) is also subject to a progressive rate structure, but it is especially difficult to administer because an owner's property values are aggregated countrywide, and the tax is sensitive to nonuniform assessment practices.

In Vietnam, the progressive rate structure with respect to residential land use was implemented to curb speculation and to ensure more efficient land use. The recurrent tax rates on land are so low, however, that they are unlikely to affect taxpayer behavior. In 2018, taxpayers in Vietnam paid only about an average USD 4.30 per year in recurrent property taxes, about the same amount as a takeaway meal.⁷ In Taiwan, the upper rate bracket boundaries were set so high that they affected few taxpayers.

Some jurisdictions have set floor or ceiling, or both, rates for the property tax. Japan abolished maximum rates in 2004 and now sets a standard rate of 1.4 percent for its fixed asset tax. Municipalities that choose to use a lower rate will receive less in intergovernmental transfers. Although more than 90 percent of municipalities apply the standard rate, almost 9 percent apply a higher rate. The highest rate as of 2020 is 1.8 percent—still well below the previous maximum rate, which was 2.1 percent. For the city planning tax, there is a maximum rate of 0.3 percent, but about half the municipalities use a lower rate.

Despite decentralizing the administration of tax on land and buildings to local governments, Indonesia's central government still determines the maximum tax rate. Policy changes since 2014 allow local rate setting, but the locally determined tax rate may not exceed the maximum rate of 0.3 percent. Some local governments apply a flat rate; however, others apply multiple

or graduated tax rates. In the Philippines, provincial governments can impose a basic tax rate up to a maximum of 1 percent, but the maximum rate for cities is 2 percent. Only 18 percent of cities apply the maximum rate, likely because they have other lucrative sources of revenue, whereas 95 percent of provinces use the maximum rates, suggesting that this ceiling rate could be raised.

The important feature of this approach to rate setting is that it allows some autonomy for setting rates at the local-government level, even while allowing the central government to more or less control the overall level of rates. Interestingly, these case studies show that even when they are given authority to set higher rates, local governments do not always take advantage of this discretion.

SINGLE VERSUS MULTIPLE OR DIFFERENTIAL RATES

A single tax rate that applies to all property types (land and buildings) or all use categories is uncommon in Asia. As is the trend elsewhere around the world, differential tax rates are increasingly used as a tool to incentivize taxpayer behavior or to promote equity. One hardly ever finds the sort of simple, flat-rate structure that most public finance scholars recommend. In most systems, the local-government tax base and tax rate regimes are jointly determined by central government, with policy makers often more concerned with keeping their constituents happy than getting the local policy mix right (Bahl and Bird 2018). Tax rates in Asia are differentiated on the basis of several factors.⁸

Differential rates have been considered in Hong Kong. Those who oppose this proposal tend to focus on issues around inequity, increased cost of doing business for commercial and industrial property owners, and the potential of causing hardship to certain sectors, such as small and medium enterprises. The taxation rating system in Hong Kong is simple in that it is based on annual rental values and applies a single rate percentage to all properties irrespective of use, location, and so on. The arguments for differential rates are that the system is well established and understood by ratepayers and the property leasing market is active with abundant rental evidence. Moreover, the existing rating system is progressive because it is *ad valorem*—that is, the higher the ratable value of a property, the higher the amount of rates payable, and the higher value ostensibly reflects an ability to pay (RVDSAR 2021).

The Tax Treatment of Underused Land and Property

Governments sometimes impose higher effective tax rates on the owners of vacant or idle land, unoccupied buildings, or underused property (Bahl

and Bird 2018; McCluskey, Franzsen, and Bahl 2017b). The rationale is to provide an incentive for development of land parcels for which the municipality makes available services and infrastructure (Grote, Nersesyan, and Franzsen 2019).

Good examples of this practice can be found in jurisdictions outside Asia. For example, in the capital city of South Africa, Pretoria, the 2018–2019 tax rate on vacant plots was 3.65 times higher than the tax rate for developed residential properties, and in Johannesburg it was 4 times higher. Seoul, Korea, and Windhoek, Namibia, follow a different approach. Vacant land parcels in new township developments are taxed at standard rates for a specified number of years. Thereafter, the tax rate is increased if the parcels remain undeveloped (Grote, Nersesyan, and Franzsen 2019). Vietnam follows a similar approach. As shown in table 2.2, global practices vary widely.

As Haas and Kopanyi (2017, 13) point out, defining what constitutes vacant or unused land may be challenging in fast-growing cities in both industrial and developing jurisdictions. Since 2015, the law in Japan specifically allows land on which an uninhabited dwelling stands to be declared

Table 2.2 Vacant Land and Underused Properties

Tax Treatment of Vacant or Unoccupied Properties	City Examples
Excluded or exempted	Bangkok ; Cairo; Karachi
Exemption on application for unoccupied buildings	Accra; Dar es Salaam
Vacant land taxed at lower rates than occupied land	Kuala Lumpur (commercial)
Vacant and unoccupied property taxed at standard tax rate	Jakarta ; Kingston; Nairobi; São Paulo
Vacant and unoccupied property taxed at higher rate	Bangalore ; Kuala Lumpur (residential)
Vacant and unoccupied property taxed at significantly higher rate	Belo Horizonte; Bogotá; Buenos Aires; Cape Town; Gaborone; Johannesburg; Manila ; Mexico City; Porto Alegre; Seattle; Seoul ; Tshwane; Washington, DC; Windhoek

Sources: Adapted from Haas and Kopanyi 2017; McCluskey and Franzsen 2013; and information from part 2 chapters. Boldface indicates cities in case studies.

vacant land—resulting in a sixfold increase in the fixed asset tax. China’s urban and township land use tax is levied on land use in cities and towns to encourage more efficient use of urban land. Thailand increases the tax rate for vacant land every three years until a maximum of 3 percent is reached. Provinces and cities in the Philippines are authorized to impose an additional tax on idle lands, but in 2015, only 15 percent of the provinces and 30 percent of the cities imposed the idle land tax, and only two provinces and nineteen cities were able to collect it.

Higher taxes may not be very effective in bringing underused properties into development. Forcing owners to develop or sell requires a tax rate that is high enough to influence behavior. But often the tax rates applied to vacant or idle urban (or rural) land are low and are applied to very conservative estimates of assessed value, and therefore the tax burden on owners is insignificant. The result is that the tax does not encourage development or redevelopment of the land, and it may perpetuate land hoarding by speculators, almost without penalty. For example, in its 2020 tax reform, Thailand established a ceiling rate for vacant land of 3 percent, but land prices have been increasing at a 7 percent rate. Another example is Kuala Lumpur, Malaysia’s capital city, which applies a lower tax rate for vacant commercial land, but for vacant residential land the rate is slightly higher than for occupied residential land (see table 2.2).

Valuation and Fiscal Cadastre Management

The key to having a good property tax is having a good valuation practice. This involves assigning values to all properties according to the law and keeping them current by regularly testing the accuracy of the estimates, reporting the results to taxpayers, and having in place a fair system for objections. A good valuation practice will shy away from complicated preferential treatments of properties. A good valuation system is difficult to implement, because it requires determining values and keeping them current, managing a huge database, dealing with objections, bringing new properties onto the roll, coordinating with other agencies, and more. And the valuation process must live with some constraints that are not easily resolved in the short run. Most of the poorer jurisdictions in Asia have inadequate data for accurate valuation, a shortage of qualified valuers, a land market that is not functioning well, and political leadership that often does not see a good valuation practice to be in its interest.

No country measures up fully to the standards of a good valuation system, but some of the higher-income jurisdictions of Asia (Hong Kong,

Singapore, Japan, and Korea) come close. The experience in the lower-income jurisdictions has not been good (Thailand, Philippines, Indonesia, India, and Pakistan). The norms outlined here are further from their reach, and revenue mobilization will continue to be stuck at a low level unless some long-standing problems with the valuation of real property are resolved. The assessment ratios reported in the part 2 case studies are low. Most reviews of the practice in low- and middle-income jurisdictions place the ratio of assessed value to market value below 50 percent (Bahl and Bird 2018; De Cesare 2012; Kelly, White, and Anand 2020). China, Vietnam, and Malaysia have property tax regimes or valuation systems that are still emerging.

Valuation Methods

The value of a property is normally determined on the basis of market value or current-use value (Kelly, White, and Anand 2020; Kitchen 2013). Market value assumes that all possible uses are taken into account in determining highest and best use and that legal regulations and building restrictions have been taken into account. Current-use value represents a market value that reflects only the present use of the property (Bird and Slack 2007; McCluskey and Franzsen 2013). The two bases differ when the current use is not the highest and best use—for example, agricultural land that would have a higher market value if it were developed for residential or commercial purposes. Often the property tax legislation will specify the value standard, such as market value, assuming highest and best use or assuming current-use value. The use of annual rental value as the basis often implies that it is the market rent that must be estimated but on the basis of current use. Therefore, if the property has a higher-value use, this potential is ignored, as is done in Hong Kong (RVDSAR 2021). Such differences can have important implications for property tax burdens.

To maximize fairness and transparency in a property tax system, assessments should be based on the market value of property, and legislation should support this principle. In Hong Kong, the property tax base is the estimated annual rental value in the open market. In Japan, it is the assessed market value. In a dynamic economy, property values constantly change. Values in one area may increase and decrease in another. Only a system based on market value will capture such changes in the distribution of property-related wealth. Jurisdictions with a high level of administrative capability and technical skills that can implement annual revaluations include Hong Kong, Japan, Korea, and Singapore.

The reason for a valuation for property tax purposes is to accurately estimate the market value of the real estate asset. The valuation process involves the combination of sound judgment and application of appropriate valuation methodologies. Still, the resulting valuation is, at best, an opinion of value that may or may not be accurate given that it depends on availability of relevant data and the valuer's skills. Interestingly, in Hong Kong there is no statutory requirement to use any particular method of valuation in arriving at the ratable value of a property. It depends primarily on the availability of rental evidence.

All this said, the standard of market value is not widely adopted for all categories of real property. For example, buildings are typically valued using depreciated reproduction costs in Japan, Korea, the Philippines, and Thailand. This approach is followed for buildings because accurate data on market transactions are scarce. Also, it is more straightforward for national or provincial government to develop uniform cost schedules for buildings to be applied by local government. For land valuation, market transactions, if available, are normally used. Assessment values in Hong Kong and Malaysia are determined directly using market rental evidence. The main problem with basing assessments on market value data is the absence of accurate estimates of market values. For the richer jurisdictions in Asia, some of the reported market values for rents and capital values would seem to be trustworthy, but for the lower-income jurisdictions these data may be inaccurate and not a good basis for assessment. This issue is discussed at length later.

The three usual methods of determining the market value of a property are the comparable sales or rentals approach, the cost approach, and the income capitalization approach (Franzsen and McCluskey 2013). All are used in Asia. The comparable sales approach compares the subject property against other similar properties that have recently been sold or leased. This method is typically used for the valuation of land, single-family residences, condominiums, and other types of property that exhibit a high degree of similarity and for which a ready sales or rental market exists. Hong Kong, Singapore, and Malaysia all apply this approach for residential, retail, and office properties. Value is determined for the whole property, land and buildings together.

The cost approach establishes value on the basis of the current cost of producing or replacing the existing building and then reflecting the actual condition of the building through a depreciation allowance. The principle behind this technique is that the market value of an asset should not exceed the cost of obtaining a substitute asset of comparable features and functionality. In other words, replacement cost is the greatest amount that a buyer would pay for a specific asset. Typically, if land and buildings are

valued separately, the land component is valued using the comparable sales method and buildings are valued using the cost method. The cost method uses building costs as a proxy for value. This approach is usually taken if there are few open market sales. There is a trend toward using this method of assessing the value of buildings as is done in the Philippines, Indonesia, Korea, and Taiwan. In Japan, the fixed asset tax assessment for buildings is based on the assessment of replacement costs and other factors (i.e., not directly related to market value). Thailand, under its 2020 property tax reforms, now values buildings on the basis of nationally determined building cost schedules.

The income capitalization approach, often simply called the income approach, values commercial and investment properties (such as office and retail buildings). This method capitalizes an income stream into a present value that can be considered the market value. It relies on information on market sales to determine the capitalization rate and on sufficient rental transactions. The method applies the market-derived yields to the annual income or rental stream to determine the market value. The most common types of properties valued by this method include hotels, resort properties, cinemas, theaters, and sports stadiums. It is widely used in Asia—for example, by Hong Kong, Malaysia, and Singapore.

Automated Mass Valuation

The scale of the property tax valuation task is immense. Most jurisdictions include hundreds of thousands if not millions of properties to be valued or revalued, often all at the same time. One solution is to do mass valuations, which are quite different from one-by-one single-property valuations (IAAO 2010). That is not to say that case-by-case valuations are not undertaken alongside mass valuation; however, they tend to be applied to particular property types, such as airports, high-end hotels, resort properties, ports and harbors, and specialized industrial properties. According to Almy (2013), the driving force behind the development of mass valuation methods has been the need to improve the valuation efficiency of the immovable property tax. Ultimately, the scale of the valuation—number of properties—has led to the widespread use of technology and automation (IAAO 2018; Kok, Koponen, and Martinez-Barbosa 2017).

Mass valuation is generally considered to mean the valuation of homogeneous property types at the same valuation date by applying statistical methodologies (Eckert 1990). The objective is to replicate the market within which real estate is traded (Fibbens 1995; Wang and Li 2019). Traditional and mass valuation use essentially the same methods, but mass valuation uses statistical models (IAAO 2017). In Hong Kong, for example,

the majority of residential units, offices, and factories are valued by rental comparison, which makes extensive use of automated valuation techniques by a computer-assisted mass appraisal (CAMA) system.⁹ To enhance the accuracy of the regression models, Hong Kong's Rating and Valuation Department uses an automated program to update the valuation characteristics.

Table 2.3 illustrates the use of mass valuation and geographic information systems (GIS) across the jurisdictions covered in this analysis. Hong Kong and Korea are examples of advanced application of mass valuation. Malaysia and the Philippines are establishing mass valuation techniques, but responsibility for valuation in these two jurisdictions is at the municipal level and progress has been slow. In Taiwan, despite the demonstrated capability of advanced automated valuation models in constructing property price indexes, these technologies have not been used. However, GIS technology is widely employed in various aspects of valuation—for example, displaying valuation results to the members of valuation committees.

When revaluations based on market values are done frequently (yearly, every second year, or even every third year), it is impossible to manually revalue every property. In its Standard on Mass Appraisal, the International Association of Assessing Officers (IAAO) considers annual assessment to be an integral component of a market value system, but it states, "Annual assessment does not necessarily mean, however, that each property must be re-examined each year. Instead, models can be recalibrated, or market adjustment factors derived from ratio studies or other market analyses applied based on criteria such as property type, location, size, and age" (IAAO 2017, 10). Annual revaluations conducted in Hong Kong, Singapore, and Korea are made possible by mass valuation techniques.

The mass valuation system in Korea values some 30 million land parcels annually. A sample of 450,000 parcels are designated as standard parcels and are then appraised by professional fee appraisers and the Korea Real Estate Board. These official values of standard parcels become benchmark values within value zones, or geographic areas of similar property types having broadly similar values. This benchmark value is applied to all individual land parcels within a zone and then adjusted by using estimated coefficients of factors affecting the unit price of land. A parcel's size, location, shape, usage, proximity to amenities, and other characteristics are collected, and the observed difference of these attributes from those of the standard parcels are measured and multiplied by the estimated coefficients derived from multiple regression models. Japan uses a similar approach in identifying standard parcels having a road frontage for the valuation of residential land.

Table 2.3 Application of Automated Mass Valuation

Jurisdiction	Use of Automated Valuation Methods	Use of GIS	Comment
China	Several cities have been developing mass valuation approaches in readiness for any property tax implementation. See Davis et al. 2020.	Several property tax projects have involved the use of GIS-based valuation modeling.	If China introduces a recurrent property tax, mass valuation and GIS-based techniques are expected to be extensively used.
Hong Kong	Multiple regression analysis is used for revaluations.	GIS is fully integrated into the property valuation methodology, particularly for commercial property.	Indexation can be used to update values for commercial property.
India (Delhi)	The unit-area method uses a fairly straightforward formula, and the method is used in several cities. Reassessments in Delhi have not taken place for several years.	GIS in urban municipalities is becoming more widespread.	GIS is now used to assist with the administration of the property tax, determining the tax base, and facilitating collection.
Indonesia	Under disrepair following devolution in 2001 and decentralization of the property tax in 2011, but some automated mass appraisal approaches were applied.	Central government had developed a GIS-based mass valuation system.	The GIS-based mass valuation system fell into disrepair following devolution in 2001, but some of the larger cities have been developing their own solutions.
Japan	Over 40,000 reference properties are appraised, and values are imputed to zones within the country.	GIS has been progressively integrated to support valuation.	
Korea	Mass valuation market-based models are widely used.	GIS is an integral part of the valuation exercise.	The country has a unified land value system. Buildings are valued using the cost methodology.

(continued)

Table 2.3 Application of Automated Mass Valuation (*continued*)

Jurisdiction	Use of Automated Valuation Methods	Use of GIS	Comment
Malaysia	CAMA is not widely used by local-government valuation departments. Capacity of staff is an issue.	Valuation departments make limited use of GIS.	Only the larger local governments (e.g., Kuala Lumpur) use CAMA and GIS.
Pakistan	Given the formulaic approach to assessment, the process is fully automated across the provinces.	GIS is integrated into the property tax system only in Punjab.	GIS captures the tax base and helps coordinate billing and collection activities.
Philippines	Some local-government areas use mass appraisal approaches.	No significant progress has been made in integrating GIS.	A mass appraisal manual has been developed, but the use by assessor departments of mass valuation approaches has been limited.
Singapore	The city applies regression analysis to determine average rental values.	GIS is fully integrated into the property tax system.	
Taiwan	Automated valuation and advanced regression approaches are not used to determine land value.	GIS is used in the administration of the land value process.	GIS is widely used in cities to indicate the spatial value of land. A commission is now studying the possibility of CAMA use.
Thailand	Automated approaches to analyze the price of land are used, but regression models are not widely used.	The Ministry of Land uses GIS in building their land parcel registry.	Buildings are valued using nationally announced building costs.
Vietnam	No mass valuation system is being used. Valuation is based on land price tables that list estimated prices per square meter for land.	No application of GIS is made within the property tax system.	The Ministry of Natural Resources and Environment is running pilot projects with technical assistance from the Korea Real Estate Board that use mass valuation and GIS. No broad-based recurrent property tax system is in place.

Source: Case studies in part 2 of this book.

None of this is to say that CAMA systems are fault-free. The use of a regression analysis alone tells us that the goal is to estimate an average value for all properties with certain characteristics. The actual observed values for properties will fall around this regression average, and so there will be differentials between actual and estimated values for most properties. A second problem is that the cost of annually repopulating the data system every year can be quite large. A third is that CAMA is not very transparent—that is, an individual taxpayer may not understand how taxable property value was determined.

There have been significant advances in the use of artificial intelligence and machine learning approaches (IPTI 2021; McCluskey et al. 2012). Research conducted by the International Property Tax Institute (IPTI 2021) concluded that although existing mass appraisal tools can be highly effective and produce excellent performance results, artificial intelligence offers another viable tool that, used properly, can efficiently produce equally—or, arguably, more—accurate valuations than can mass appraisals for many jurisdictions.¹⁰

Frequency of Revaluations

For the property tax to be fair and equitable, the underlying valuations should be regularly revised to reflect changes in market value. In dynamic real estate markets, revaluations provide fairness and revenue buoyancy (IAAO 2020; Walters 2011). Legislation may specify the frequency of revaluations, but they may be delayed, postponed, or canceled, as has been the case in India, Indonesia, Malaysia, and Pakistan. Kuala Lumpur undertook a revaluation in 2014 following a gap of 22 years. The timing of general revaluations in Hong Kong is not specified in the Rating Ordinance, but since 1988 general revaluations in Hong Kong have been conducted annually. According to the IAAO, all properties should be revalued at least every four to six years (IAAO 2020). Frequent revaluations maintain the legitimacy of the tax and reduce the risk of sudden valuation shocks and of significant shifts in tax burdens (Bird and Slack 2004). In a value-based system in which property market values change over time, a shorter revaluation cycle is preferable.

In the Philippines, all provinces and cities are mandated to update and revise real property assessments and classifications every three years. Since about 1990, compliance has been generally poor, and many provinces and cities use dated valuation rolls. Still, there are no penalties under the law for noncompliance with the three-year rule, and no administrative sanctions or incentives for compliance have been introduced. Land values in Thailand before the 2020 property tax reform had not been revised for 30 years. In

Taiwan, land values are updated every two years, and building values are updated every three years. Even so, certain buildings in Taiwan have assessed values that are badly outdated.

Annual revaluations, which have the benefit of keeping property tax values current, are relatively rare internationally. Jurisdictions that have dynamic or volatile property markets tend to use them (Hong Kong and Korea). Table 2.4 shows the frequency of reassessment across systems, some as often as annually but most ranging from three to ten years. The main reasons for the infrequency of revaluations are (1) political inertia due to a perception that increased values will lead to tax increases; (2) the lack of financial resources to undertake property inspections and build the necessary databases; (3) the high cost of acquiring new software programs and automated valuation tools, including GIS, to support revaluation; and (4) skill shortages and technical capacity gaps limiting the ability to conduct revaluations.

The costs of revaluation can be high even though technology and automated approaches can reduce these. The cost benefit of annual revaluations should be carefully considered. Although legislation may specify the period of revaluation cycles, many jurisdictions (Indonesia, Malaysia, Pakistan, and Philippines) have difficulty adhering to the law.

An alternative to revaluation of the tax roll is indexing (for example, by the consumer price index or rate of inflation). This is relatively uncommon in Asia. Indexing all properties by the same factor fails to capture the differential rates at which individual properties change in value, but giving up some fairness may be a small price to pay if there are insufficient resources to regularly conduct revaluations (Bird and Slack 2004; Kitchen 2013). In Hong Kong, indexation is considered appropriate if new ratable values are to be generated or adjusted in bulk and on a uniform basis. Indexing the assessment base (between infrequent reassessments) to keep up with inflation has been discussed in Pakistan, where valuation tables for land and buildings are used (Bahl, Cyan, and Wallace 2015). It has also been recommended that India make a more frequent adjustment to the coefficients used in the calibrated area system (Rao 2008).

Property Data for Valuation Purposes

Valuation and assessment are data driven and will likely become more so in the future. But recording the particulars of every parcel in a country and managing the data flow to support valuation is a daunting task. In many Asian jurisdictions, the volume of information generated by new technology appears to be outrunning the resources available to use it. Major data challenges are (1) getting enough accurate estimates of the market

Table 2.4 Frequency of Revaluations

Jurisdiction	Revaluation Frequency	Comment
China	–	No national, broad-based property tax yet exists.
Hong Kong	Annual	Annual revaluations have been conducted since 1988. There are about 2.5 million assessments and 1.85 million residential properties.
India (Delhi)	Every three years	Delhi's move to the unit-area value system effectively removes the need for revaluation. However, benchmark base values should be revised every third year. Indexation of the base values can be done, but has not. Assessments in some large cities are outdated.
Indonesia	Every three years	Municipalities have some autonomy as to the frequency of revaluations. Most local governments have not revalued according to the three-year cycle recommended in the law.
Japan	Every three years	Revaluations are generally updated according to this cycle.
Korea	Annual	About 30 million properties are revalued annually. Values are prescribed nationally for local-government use. The values of land and buildings are announced annually.
Malaysia	Every five years	The frequency is specified in legislation but few local governments meet this schedule. Kuala Lumpur's last revaluation was 2014; the previous one was in 1999.
Pakistan	The valuation tables according to legislation are to be revised every ten years by provincial tax departments.	The valuation tables in Sindh are very outdated. In Punjab the tables were updated in 2014. Recommendations have been made to apply an index in the years between revaluations.
Philippines	Every three years	The majority of local governments are unable to meet the three-year cycle.

(continued)

Table 2.4 Frequency of Revaluations (*continued*)

Jurisdiction	Revaluation Frequency	Comment
Singapore	Annual	To revalue 1.53 million assessments annually, extensive use of automated valuation methods is made.
Taiwan	Land values are reassessed every two years. Building costs and adjustment factors are reviewed every three years.	No value coordination occurs because land values and building values are assessed separately and at different intervals. Updating of building values tends to lag changes in market construction costs.
Thailand	Every four years	The national government announces new appraisal values on a four-year cycle. A new tax roll was available for 2020, but the previous roll was extended during the transition to the new tax regime.
Vietnam	Every five years	The national government establishes the land price framework within which the provincial people's committee develops land price tables.

Source: Case studies in part 2 of this book.

value of property; (2) managing interagency data flows; (3) handling the large amount of data necessary to support the property tax administration; and (4) assessing the potential of “big data.”

Ensuring Ample, High-Quality Data on Property Transactions

Accurate and timely data on real property transactions (both sales and rentals) are key information for a market value-based property tax (Bahl and Bird 2018; Kelly 2014; Walters 2011). However, the quantity and quality of transaction data is problematic. Without an adequate number of sales or rents by property type across all locations, inferences cannot be made about the total population of properties. If buyers and sellers are dishonest in declaring the sale price and underdeclarations are not policed, data will be inaccurate. This is a long-standing and worldwide problem (Alm, Annez, and Modi 2006; Bahl 2004; Franzsen 2020).

Underdeclaration of sales prices is driven by high property transfer tax rates, perceived low probabilities of being detected, and a weak penalty system.

In Indonesia and the Philippines, for example, sales data are available from the declaration required for the levy of the transfer tax, which also is a local tax. The question is whether the assessing governments can use this declared, but suspect, data to assist in revaluations.

In most lower-income jurisdictions in Asia, the declared transaction price is accepted even when suspect. The Philippines attempted to deal with underdeclaration by developing official land values according to location. These values were to be updated every three years, but this rarely happened. In Indonesia, the declared transaction prices are used for transfer taxes unless they are lower than the government-estimated value of the property. But the government-estimated value is itself understated by about 50 percent.

Sharing Property-Related Information Across Agencies

In addition to problems with the quality of and quantity of data, there are issues with the flow of information to the valuation authority. The valuation authority is often not a direct recipient of market price information (McCluskey, Franzsen, and Bahl 2017a), because the transactions are recorded within a different government organization. For example, in Malaysia, the property transfer tax (known as stamp duty) is a federal tax and is administered by national government valuers. However, the land information system containing ownership data at the state level is neither integrated nor linked with property data held by local authorities. Property registration is under the state authority, and any change of ownership on the title is not directly shared with the local government. A similar situation holds in Thailand. This is a significant problem for the administration of a value-based property tax. Solutions to such problems could be as easy as the government entities signing and honoring a memorandum of understanding to allow data sharing. But in practice, the political economy and sometimes the law make the solution much more difficult.

Managing Huge Amounts of Data

Property tax administrations must handle a huge information flow. For example, if 500,000 properties are on the valuation roll and each property has 15 characteristics, the database system must hold 7.5 million bits of information. In addition, property tax systems often require that specific categories of property be valued—for example, Japan's fixed asset tax allows municipalities to levy tax on land, structures, and depreciable assets (construction equipment, machinery, factory equipment, and other assets).

In Hong Kong, the Rating and Valuation Department has been able to track and annually refresh the details of about 382,000 rental records, comprising about 228,000 domestic and 154,000 nondomestic properties. These rental details provide core evidence for valuations carried out by the

department. In the 2019/2020 valuation list, this information was used to value 2.1 million residential property assessments and 410,000 commercial assessments.

Local governments in Thailand have the responsibility to survey all properties in their jurisdictions manually and to calculate the land and building tax liability of each owner. In Japan, there are almost 41 million registered owners of land and some 42 million owners of buildings in the tax cadastre (as of fiscal year 2018). In Malaysia, legislation empowers the local authority to enter any property to inspect it. In addition, the law also empowers the local authority to require the owners or occupiers of any property to furnish information on the size of the property, situation, quality, use, and rent necessary for the preparation of the valuation list.

The administrative costs of property taxation in Korea come mainly from the massive data-handling requirements required for annual reassessment. Approximately 30 million taxable objects (land and housing units) are listed in the property tax roll, and at least 25 percent of them need to be updated annually for the changes to their ownership and physical characteristics.

Harnessing New Technology to Manage Big Data

Administrations are collecting an ever-increasing amount of property-related data from traditional sources but also from digital sources such as orthoimagery, digital payments, electronic invoicing, and connected devices such as point-of-sale solutions—handheld credit-card payment machines used by revenue collectors. Many administrations are expanding their data collection capabilities even further into new areas such as aerial imagery, and the use of unmanned aerial vehicles (drones) has created an exponential source of spatial data in places like Hong Kong and Korea. Satellite imagery has been very successfully used in Punjab, Pakistan, to identify land and buildings. Jakarta, Indonesia, has also been using drones to track property changes.

To address the rapid influx of information, more and more administrations are looking to modernize their big data capabilities. Big data is a field that systematically analyzes, extracts information from, or otherwise deals with data sets that are too large or complex for traditional data-processing application software to handle (Kok, Koponen, and Martinez-Barbosa 2017; Marr 2015). This includes integrating data from multiple sources such as own-source data, taxpayer-declared information, third-party data (land registry), information collected by utility companies, and aerial and satellite imagery.

Successful data-management strategies focus on the desired outcome of the valuation administration, resources required for implementation,

and the right balance of data security and transparency. Having a clear strategy helps valuation administrations assess their data collection processes in terms of data quality (data cleansing), data management, storage options (traditional versus cloud), the need to build representative data sets, data modeling output, active searches for and integration of new data sources (internal or external, structured or unstructured), and the application of effective data analytics.

Establishing effective data analytics processes requires a blend of technical skills, including mastery of statistical techniques, geospatial tools, and deep data analysis. For valuers and data modelers, the emphasis is moving toward data mining, machine-learning tools, and artificial intelligence-based solutions (PricewaterhouseCoopers 2022). The ultimate objective is the delivery of high-quality valuations that meet quality control metrics and standards while providing understandable values.

Higher-income jurisdictions in Asia are making considerable progress in establishing data analytics. Progress has been slower in the lower-income jurisdictions, in part because of their resource and capacity limitations in absorbing new technology. In the meantime, a simplification of property tax structures could be a useful policy program.

Objections and Appeals

Property tax legislation should include objection and appeal processes to allow property owners to challenge their valuations. International best practice (IAAO 2014) suggests that taxpayers want a process from start to finish that is quick, cheap, simple, proportionate, stress-free, rigorous, and authoritative. Even though quick and cheap, and rigorous and authoritative are not likely to be achieved by an appeals process, best practice appears to embody (1) independence from those whose decisions are being reviewed; (2) timeliness and proportionality; (3) an initial informal hearing to attempt resolution of the matter in dispute; (4) comprehensive, non-technical information about the process; (5) nonadversarial hearings that are not too legalistic; (6) consistent and comprehensible decisions; and (7) good value to the taxpayer (Kitchen 2013; McCluskey, Franzsen, and Bahl 2017b; Plimmer 2013).

Appeals should provide an opportunity for property owners to be heard, and if appropriate, to meet with the valuation agency (McCluskey and Franzsen 2013). In the case of valuation disputes, an objection or appeal system should make possible opportunities for informal meetings with the valuation agency and for formal process meetings before independent bodies are involved in the dispute resolution. Key components of any valuation appeal system are reliance on clearly written procedures, a well-developed

public relations program for notification, and avoidance of actions that might suggest discrimination in the way objections are treated and resolved (Plimmer 2013).

Asian jurisdictions differ in their approaches to the objection and appeal process (table 2.5). Generally speaking, value-based property tax systems have transparent objection and appeal processes. However, where property values are prescribed by national, provincial, or local government, the rights to object are severely limited. The cases in point are cities in India under the unit-area property tax and Punjab and Sindh Provinces in Pakistan, where valuation tables are developed at the province level. In both India and Pakistan, objections can be made only against inaccuracies in the size of the land or building or whether it is owner occupied or rented. Because the valuation tables are prescribed, there is no real opportunity to object to the values. This is also true in Vietnam, where land price frameworks and land price tables are prescribed by the national and provincial governments.

Responsibility for Valuation

Assigning responsibility for valuation is a key decision, because valuation is arguably the most difficult aspect of administering a property tax. The best approach will be to use some combination of central government, provincial or local government, and the private sector, depending on the comparative advantage of each (Kelly, White, and Anand 2020; Kitchen 2013; Walters 2011). The division of valuation functions should follow those comparative advantages. A specialized central-government agency may be best equipped to undertake valuations nationally. Also, the setting of valuation standards, practices, and procedures might be more efficiently done at the center because it permits efficiency advantages of scale and technical expertise to be captured.

But centralized valuation administrations have some disadvantages: (1) the scale of the valuations can overwhelm the administration; (2) higher-level governments might have little incentive to make extra effort to improve revenue collections for local governments; (3) there can be greater political influence at the national level, which can affect frequency of revaluations; (4) centralized valuation activities can lead to a disconnect with local real estate dynamics; and (5) the local property tax regime might be different from that at the central level.

In Korea, the determination of property values is the responsibility of a designated government-run assessment agency, the Korea Real Estate Board. This board is governed by appointed officials of the Ministry of Land, Infrastructure, and Transportation.

Table 2.5 Objection and Appeal Systems

Jurisdiction	Objection and Appeal Process
China	None; no annual broad-based property tax exists.
Hong Kong	Objection to commissioner of Rating and Valuation. Further appeal to the Lands Tribunal and then on points of law to the Court of Appeal.
India	With the expansion of self-assessment, the concept of appeals has been diluted, although the municipal corporation can audit taxpayer returns, which can result in appeals from the taxpayer.
Indonesia	Objections to the land value and building value can be made to the valuation department of the municipality.
Japan	Objections are made to the local municipality.
Korea	Objections can be made against the individual assessments on both land and buildings. The Korea Real Estate Board handles all appeals.
Malaysia	Taxpayers can object to their assessed value or to correct clerical errors. Objections are made to the municipality that prepared the valuation.
Pakistan	Because the property tax is based on prescribed tables, taxpayers have no opportunity to appeal the assessed value.
Philippines	The first appeal is to the assessor. A further appeal can be made to the local board of assessment appeals and from there to the Central Board of Assessment Appeals.
Singapore	Objections are made to the chief assessor. Objectors dissatisfied with the result may, within 30 days, appeal to the Valuation Review Board. Further appeal goes to the High Court.
Taiwan	Valuation disputes are heard by the expert committees. A further appeal can then be made to the administrative courts.
Thailand	If taxpayers believe their assessment to be inaccurate, they can appeal to the local authorities, who have one month to determine the appeal. If dissatisfied, taxpayers can then make a further, final appeal to the civil court.
Vietnam	National government establishes a land price framework that is then used by the provinces to determine land price tables used for the land tax. Using established prices, owners declare the characteristics of their land and calculate the tax due. Essentially no objection is allowed to the prescribed land value per square meter.

Source: Case studies in part 2 of this book.

In Thailand, the national Treasury Department establishes schedules of land prices and building costs, which are then applied by local government in determining individual assessments. Under the Property Appraisal Act, the nationally determined appraisal values must reflect the uses and types of properties and be in accordance with appraisal and economic principles, particularly the market value of the property. This approach separates the valuation of land and buildings, whereby the price of the latter varies with the type of construction. The approach used by the government is to determine the value of buildings and condominiums according to a set nationwide values per square meter. A depreciation allowance is established on the basis of type of construction material. Both land prices and building costs are reviewed and adjusted at four-year intervals.

Valuations in Taiwan are conducted by higher-level government assessors. Before values can be adopted, the assessors must submit their values along with supporting evidence to an expert committee. This committee has the authority to make changes to the submitted valuations.

An advantage of having valuations conducted by a local administration is familiarity with the local property market. However, valuations by local government may suffer from a lack of technical valuation capacity and inadequate investment in valuation systems and tools. But all local governments in a country are not alike, and larger urban areas may have the capacity for better property tax administration. A major problem with the devolution of responsibility for the property tax in Indonesia is the differing capacity in local governments. One view is that the most effective valuation administrative strategy is to share administrative responsibilities on the basis of comparative advantage (Kitchen 2013). In 1996, the Local Tax Act in Korea was amended to prohibit local governments from maintaining their own land valuation systems; they were required to apply a certain percentage of the publicly declared value estimated by national government as their taxable land and housing value. Of course, the setting is also important in determining the proper division of administrative responsibility—for example, high-income regions will find decentralization more feasible than low-income areas.

Table 2.6 summarizes the responsibility for valuation in the relevant jurisdictions.

Fractional Assessments

Fractional assessment fixes assessments of different types of property at different percentages of estimated full market value (IAAO 2011). In effect, it allows certain types of properties to be taxed at a lower effective rate than other properties (Bird and Slack 2004). The classifications are often

Table 2.6 Responsibility for Valuation

Jurisdiction	Tier of Government	Valuation Responsibility
China	–	Not yet formally decided, but it is likely to be municipal administrations if a recurrent property tax is implemented.
Hong Kong	Central	Rating and Valuation Department.
India (Delhi)	Local	Municipal corporations, Municipal Valuation Committees.
Indonesia	Local; provincial for Jakarta	Devolution of property tax administration began in 2011 when municipalities and city governments began taking over from central government.
Japan	Local	Private-sector valuers, tasked by municipalities.
Korea	Central	Government-run assessment agency, the Korea Real Estate Board.
Malaysia	Local	Department of Valuation and Property Services.
Pakistan	Provincial	Excise and Taxation Department.
Philippines	Provincial and city	Provincial assessment departments; local assessment departments.
Singapore	Central	Inland Revenue Authority.
Taiwan	Central	Land values are determined by the local land administration department and building values by the revenue service department. Each set of valuations is reviewed and approved by separate expert committees.
Thailand	Central	The Ministry of Finance establishes national land prices and average building costs, which provincial assessment committees may adjust.
Vietnam	Central and provincial	Central government establishes base value ranges for provinces. Provincial people’s committees then apply these base values to the districts.

Source: Case studies in part 2 of this book.

based on current use; for example, agriculture is generally given a preferential assessment rate. It may fall to the valuer to classify each property in order to apply the proper fractional assessment.

The practice of fractional valuation varies from country to country. Formerly, local governments in Korea were empowered to set the assessment ratio. However, a presidential decree has now set a nationally uniform fractional assessment ratio for residential property at 60 percent and 70 percent for land and commercial buildings. In addition, differential statutory tax rates are imposed on commercial and residential buildings.

In Japan the standard fixed asset tax rate for land is about 70 percent of the public valuation. For agricultural land, the assessment ratio is 45 percent of the public valuation. The Philippines assesses residential property at 20 percent and commercial property at 50 percent.

Some might see classification of properties for assessment purposes as violating the economic principles of value-based (*ad valorem*) taxation because properties tend to be taxed at more or less favored percentages of value, on the basis of political rather than objective considerations. Classification also adds a layer of complexity. A system with three classes of property and assessment fractions ranging from 10 percent to 50 percent of market value may not be too difficult for taxpayers to understand. Some systems, however, may have 10 or more classes and fractions ranging from 5 percent to 60 percent of market value. Property classification can violate the transparency standard by creating a less open system in which assessment equity errors are easier to hide and more difficult to discover.

Self-Assessment

There are three versions of self-assessment. Under the first version, the taxpayer declares the characteristics of her property, such as size, number of rooms, and age. The valuation authority then vets and approves them. The second version is the declaration of value or factors determining value. Taxpayers may complete a self-assessment form that asks the location of their property, the type and area of the building and land, and the use (residential, commercial, industrial, etc.). Taxpayers can then calculate the assessed value of their property from schedules provided by the taxing jurisdiction. On the basis of this valuation, an automated routine calculates the tax liability (e.g., in India, Vietnam).¹¹ In a third version, the property owner self-declares the value.

Before Thailand's reforms that began in 2017 and culminated in 2020, property tax was based on self-declaration. In the newly reformed system, the Treasury Department will undertake the valuations. Taiwan had a self-

declaration system in place for several years, but it failed badly because taxpayers did not report truthfully. In the Philippines any person owning real property or having a legal interest in it is required to file with the local assessor a sworn statement that describes the property in detail and declares its true value. This must be done once every three years, coinciding with the mandated period of revaluation of property values at the local level. This is a useful practice when transaction data are unavailable to support market value determination.

The two main advantages of self-assessment and mandatory data reporting are that (1) large amounts of data can be collected over a relatively short period (as opposed to the time it would take the property tax administration to make in-the-field inspections); and (2) administrative costs are reduced because the obligation is moved from the government to the taxpayer. The main disadvantages relate to the potential lack of accuracy and uniformity in the data reported, and the likelihood that taxpayers will not be honest in their reporting.

Administration of the Property Tax

Jurisdictions strive for full coverage of all taxable properties, a near 100 percent collection rate, and low compliance costs for taxpayers. Of course, no country achieves this, but some come very close. Property tax administrative efficiency is generally better in Asia's high-income jurisdictions (Hong Kong, Japan, Korea, Singapore, and Taiwan) than the middle- and lower-income jurisdictions (India, Indonesia, Malaysia, Pakistan, Philippines, Thailand, and Vietnam), as evidenced by the higher collection rates in the former group. By 2018, rates arrears in Hong Kong stood at less than 0.5 percent of annual rates demanded. In 2017, collection of the fixed asset tax and city planning tax in Japan were, respectively, 99.3 percent and 99.4 percent of taxes due. Also in 2017, the recurrent property tax collection rate was 97 percent in Korea, 95 percent in Singapore, and 96 percent in Taiwan. (China has not yet introduced a recurrent property tax.)

Data on collection rates for some lower-income jurisdictions are not readily available, but indications from the case studies in part 2 are that they are well below those reported for the higher-income jurisdictions. For example, the property tax collection rates reported for the Philippines and Indonesia are 65 percent and 80 percent, respectively, and in Indonesia the level of arrears is equivalent to about 25 percent of property tax revenues. Although collection levels vary among Pakistan's provinces, the average is reported to be between 50 and 60 percent. These estimates correspond

with the collection rate estimates reported for developing jurisdictions of between 30 and 60 percent (Bahl and Bird 2018; Kelly 2014; Kelly, White, and Anand 2020; Mohanty 2014). With reference to a Finance Commission of India Report of 2009, Mohanty (2014) reports a collection efficiency rate of only 37 percent for Indian cities.

The discussion that follows sheds some light on the reasons for the weak administration of property taxation in the poorer jurisdictions of Asia. It covers several issues related to the property tax: supervision and control of the billing and collection processes, payment options, enforcement and recovery of arrears, and communication with taxpayers. In nearly all facets of property tax administration, property tax practices appear to be more cost effective in jurisdictions that have reached a higher level of economic development.

Supervision and Control

Not surprisingly, administrative processes and procedures and taxpayer support are better developed in the high-income jurisdictions (Hong Kong, Japan, and Singapore). In Hong Kong, the Rating and Valuation Department provides a one-stop service to ratepayers, who can opt to receive one consolidated bill covering all their properties. The printing and enveloping of rates demands are outsourced to a private contractor, and the delivery of tax bills is outsourced to the Hongkong Post (the government's postal services department). The Rating and Valuation Department has been making service improvements and innovations—for example, combining demands for rates and government rent to ratepayers with multiple properties. Although the responsibilities are contracted out, the department remains accountable for the outsourced tasks. The control of the property tax administration is similarly efficient in Singapore and Japan.

Control of property tax administration is more difficult in the poorer Asian jurisdictions. In the Philippines, provincial and city governments have wide-ranging responsibilities that must be coordinated. Implementing an effective property tax requires involvement of local tax authorities and, thus, coordination and collaboration among all the relevant ministries and between levels of government. This is not easy to achieve in practice. They have the authority to decide on the property values and tax rates, and they provide relief for property owners and taxpayers, impose interest and penalties, apply discounts, and enforce tax collection measures within their jurisdictions. The assessor is important in the first three phases (property identification, appraisal, and assessment) and in records management, and the local treasurer oversees tax collection and enforcement. Coordination can be difficult. In Vietnam, the Ministry of Finance, the Ministry

of Construction, and the Ministry of Natural Resources and Environment all provide information for administering property taxation. This fragmentation likely results in gaps and duplication of effort. Implementing the property tax effectively also requires the involvement of local tax authorities, and thus calls for coordination and collaboration among all the relevant ministries and between levels of government.

Billing, Payment, and Compliance Costs

For many lower-income Asian jurisdictions, compliance rates for the property tax remain high (Kelly 2014). Where compliance costs have come down, collection rates are higher. The collection problem in low-income jurisdictions does not appear to be affordability, because the effective tax rate is often very low and because most jurisdictions offer flexible payment options. For example, the real property tax in the Philippines may be paid in a lump sum or in four equal installments without any interest.

The failure to deliver notice of taxes due can be a problem, especially in jurisdictions with many small governments. Again drawing on the experience in the Philippines, some local-government units (LGUs) previously sent bills by courier services, but the present practice is to post notices on real property tax payment deadlines in public places. Although all nonagricultural land taxpayers in Vietnam are on the tax roll and assessed, payment notifications are sent to only about 25 percent of taxpayers, those whose tax due exceeds the cost of billing.

Payment Options

Technology has significantly reduced the compliance (time) costs of paying property taxes in the richer jurisdictions of Asia (RVDSAR 2021). In 2017–2018, 36 percent of rates payments in Hong Kong were made by electronic means. Payments were made through bank autopay, payment by phone services, ATMs, the Internet, and postal service or in person at one of the 121 post offices or 1,400 convenience stores. In Japan, options for payment include ordinary banks and postal banks; most convenience stores; the Pay-easy network, which allows payment via the Internet or ATMs; registered bank transfer; and credit card. Similarly, in Taiwan, taxpayers can pay at ATMs, banks, or shops or via debit order, electronic funds transfer, or the Taiwan pay system. Singapore piloted digital property tax bills in 2017 with text messages (SMS notification). Acting on taxpayers' positive response, government dispatched nearly 1 million e-PT bills in 2018.

The local governments in the low-income jurisdictions of Asia are at an earlier stage of using electronic modes of property tax payment, although progress is noticeable. Several payment options are available in

the Philippines, though these differ among LGUs. Satellite collection offices are commonly set up and operated directly by city or municipal treasury officers during the collection period. Some LGUs allow electronic payment, using credit and debit cards; others have mobile or off-site payment facilities. Government financial institutions where LGUs maintain their accounts can also be used. In Pakistan's Punjab Province, payment by mobile phone is also possible; and in Jakarta, Indonesia, payments can be made at ATMs.

Collection of the nonagricultural land use tax in Vietnam may be outsourced to a collection agency through a fee-based contract with the local tax authorities. Fees range from 5 percent (Hanoi and Ho Chi Minh City) to 8 percent in the mountainous provinces in the northern region and the provinces in the Central Highlands. However, not many agencies accept these contracts because the nonagricultural land use tax yields little revenue, making the collection fee very small.

Enforcement and Recovery of Arrears

Finding delinquent taxpayers and recovering arrears are important components of any property tax system. Hard administrative measures (such as interest and penalties) and legal measures (such as tax liens, debt recovery through the courts, and forced sales) are available in most jurisdictions. But so are soft measures (better communications, naming and shaming). To the extent there is a pattern in Asia, it is that higher-income jurisdictions are willing to enforce with hard measures, and lower-income jurisdictions tend to be more hesitant.

In Hong Kong, rates not paid by the due date may be subject to a surcharge of 5 percent and a further 10 percent if still unpaid after six months. Rates are recoverable as a debt to the government. For arrears not exceeding about USD 6,450, cases are heard in the Small Claims Tribunal; the District Court handles larger amounts. If rates remain outstanding after the court's judgment, the commissioner of Rating and Valuation may prohibit any transfer of the property until rates are paid. The law in Hong Kong is silent on further stringent measures such as allowing distress and sale of goods.

Indonesia, Japan, Pakistan, and the Philippines charge interest on late payments. In Japan, the interest amounts to 2.6 percent for the first month of arrears, but increases to 8.9 percent in the second month. In practice, these interest rates align with the prime lending rate. Malaysia follows detailed steps in the case of delinquency, issuing forms one after the other. In both Japan and Malaysia, authorities may seize the assets of a delinquent taxpayer and sell them in a public auction.

Taiwan heavily penalizes arrears. A penalty fee of 1 percent for every two days in arrears and forced execution of penalties (e.g., seizure of bank accounts) by the courts is possible after only thirty days. In Thailand, taxpayers may face penalties of 10 to 40 percent of the total amount of the unpaid tax and a further 1 percent interest on the total amount of the unpaid tax per month. If taxpayers refuse to pay their taxes without cause, they must pay a fine and in some cases can be jailed.

The Philippines places a lien for unpaid property taxes on the subject property, which is superior to all liens, charges, or encumbrances, that will be extinguished only when the tax and all the related interests and expenses are paid. City and municipal treasurers must apply payments of real property taxes to prior years' debt first, including interest and penalties. Only after settlement of these liabilities will payment cover the current year's liabilities. In Singapore, outstanding property tax also constitutes a tax lien (first charge) against delinquent properties, and as a last resort, these properties may be seized and sold. This is also the case in Thailand.

Although penalties for nonpayment seem to be in place, detailed evidence on enforcement results is not readily available. It remains unclear as to whether the probability of detection or the enforcement of penalties are effective deterrents.

Communication with Taxpayers

Property tax policy and administration ought to be transparent. This begins with good communication with taxpayers. Taxpayers need to know why their tax bill is what it is and why their neighbors pay more or less than they do. It is important that they understand proposals to increase tax bills. All this can play an important role in enhancing compliance and lowering resistance to property taxation.

Hong Kong's Rating and Valuation Department prides itself on its transparency of property and market information, operational efficiency, and good communications with taxpayers. An online property information platform integrates more than 2.5 million records held by the department and the Land Registry. Billings and payments, viewing of accounts, changes to payers' details, searches for ratable values in new valuation lists, and signing and submission of specified forms can all be done online. A 24-hour call center responds to telephone inquiries on all aspects of services, and the user-friendly website is updated regularly.

In Japan, most municipalities encourage taxpayers to pay their property taxes by providing notice of assessment and by explaining the purposes of property taxation. If taxpayers cannot make a required tax payment, municipal authorities seem quite willing to negotiate a suitable arrangement

(such as deferral of payment or reduction of the burden for taxpayers who qualify for hardship relief) as alternatives to seizing and disposing a taxpayer's assets. The Tokyo Metropolitan Government has detailed web pages explaining the property and land tax assessment and payment systems.

Malaysia experienced a somewhat surprising administrative regression. Its online system, created in 2004, was supposed to provide online services for the public to interact electronically with local authorities. The system allows the public to review license and rental accounts, lodge complaints, and make payments. But many customers apparently prefer direct over-the-counter service. In 2019, only 14 local authorities were using the online service, compared with 64 local authorities in 2012.

In 2013 and 2014, the Philippines resorted to naming and shaming as part of the Department of Finance's Tax Watch campaign to increase transparency on the payment of national and local taxes and to encourage people to be tax compliant. Provinces and cities were profiled and ranked according to the age of their schedule of fair market value, and the public was informed of revenues forgone by LGUs for not revising the property values. The goal was to inform the public of the noncompliance of some LGUs and to recognize those that were following the legal mandates in updating property valuations. The response by councils was an increase in total real property tax revenues in 2015 and 2016.

Taxes on Property Transfers

Property tax usually refers to the recurrent annual tax on land or buildings. If property transfer taxes are even included in the discussion, they are treated as separate taxes and their connections to the recurrent property tax often are ignored. This is probably because transfer taxes are levied only when transactions occur, they are often levied by central government, and their rate and base changes are often centered on correcting overheated housing markets. But there are good reasons to view the property transfer tax as part of the overall property tax regime and to look for ways to harmonize its structure and administration with recurrent property taxes.

The annual property tax and property transfer taxes have essentially the same base (the value of property or the user right), liability for payment of both is with the (past and present) owners,¹² both may be an important source for local-government revenues, and they are linked, however imperfectly, by their assessments. Moreover, transfer taxes often are structured to enhance vertical and horizontal equity in the taxpaying popula-

tion and to affect patterns of land use and land ownership. Recurrent property taxes take on these same objectives.

For several reasons, real estate transfer taxes have found their way into tax systems, and their staying power has been great (Alm, Annez, and Modi 2004; Bahl 2004; Franzsen 2020). First, it is an easy tax handle because buyers and sellers in many jurisdictions want a legal record of ownership and therefore will voluntarily comply (Bird and Slack 2014, 117). Second, it can be collected with ease, because the title or deed registration system is the audit mechanism to ensure compliance (Franzsen 2020). Third, the distribution of the tax burden may be progressive, especially in jurisdictions where value thresholds (Indonesia) or progressive rates (China, Korea, and Malaysia) apply. Fourth, a property transfer tax might reach that part of the taxable capacity (real property wealth) that is not captured by most other taxes. Finally, governments use property transfer taxes to cool down an overheated investment market in real property.

In some Asian jurisdictions, the property transfer tax yields significant revenue, equivalent to a large share of the recurrent property tax. This is also the case in the European Union, where, in 2015, revenue raised from property transfer taxes was larger than that raised from recurrent taxes in nine of the twenty-eight member states (Brzeski, Románová, and Franzsen 2019).

The Practice in Asia

All the jurisdictions covered in part 2 levy some form of tax or charge on property transfers. The taxpayers are both individuals and companies. Systems range from a single tax on property transfers (India, Japan, and Malaysia) to complex systems that collect multiple taxes when properties or property rights are transferred (China, Pakistan, Philippines, Taiwan, Thailand, and Vietnam). The practice is more advanced in some jurisdictions (Hong Kong and Singapore), and in others it is more rudimentary (India and Pakistan). Graduated tax rates are applied in China, Korea, Pakistan, Singapore, and Taiwan, which further complicates the administration. Singapore and Korea use separate surcharges on the basic rate of the transfer tax (table 2.7).

Tax Structure

The base of the property transfer tax is the market value of the property (or user right) transferred or the sales price of the property or the profits derived from the transfer. In some jurisdictions, the *de facto* tax base has become the declared price of the transaction, and in others it can be an

Table 2.7 Property Transfer Taxes and Other Fees and Charges on Land

Jurisdiction	Tax Type	Taxpayer	Tax Base	Tax Rate/Fee	Revenue	Comment
China	Deed tax	Buyer	Transfer of user right for lands and buildings	3%–5% of the purchase price	Local	Rates are preferential or exclude residential properties.
	Land appreciation tax	Buyer	Net income from the transfer of user rights	30%–60%, based on net income	Local	A progressive scale applies.
	Stamp tax	Buyer		0.05%	Local	
Hong Kong	Ad valorem stamp duty for first-time buyers	Buyer		Progressive scale up to 4.25%	Central	Hong Kong permanent residents who are buying their first homes or switching homes pay this tax.
	Special stamp duty	Seller		20%; 15%; 10%	Central	Applies from October 27, 2012, on residential property, and rate depends on how long property was held.
	Buyer's stamp duty	Buyer		15%	Central	Applies from October 27, 2012, on residential property except for permanent residents buying property for themselves.
India (Delhi)	Stamp duty	Buyer	Selling price or market value	Different rates in different states; Delhi surcharge rate is 5%	State and local	Revenues are shared with cities in some states.
	Registration fee	Buyer		1% (Delhi)	State	
Indonesia	Acquisition tax	Buyer	Based on the value of the transaction	5% of the sales price as ceiling	Local	Tax-free value threshold of IDR 80,000.
	Property transfer tax	Seller	Based on the value of the transaction	2.5%	Central	On sales price or locally assessed value, whichever is higher.

Japan	Real property acquisition tax	Buyer		4% standard rate; 3% for land and residences	Prefectures	Same value base as fixed asset tax, not purchase price; value thresholds apply for land and buildings.
Korea	Acquisition tax	Buyer	Declared price or the "standard market price fixed by Govt.	1%–4% of purchase price	Local	Higher, progressive rate structures are applied to higher-value properties.
	Surtax for rural development			0%–0.2% of purchase price		
	Education surtax			0.06%–0.4% of purchase price		
Malaysia	Stamp duty	Buyer		1%–4% (sliding scale)	Central	As of 2019, 4% above MYR 1 million; also a capital gains tax.
Pakistan	Stamp duty	Buyer	Capital value as determined by the district council	3%	Provincial	Payable when value of property is greater than PKR 4 million.
	Capital value tax	Buyer	Same as stamp duty	2%	Provincial	
	Registration fee	Buyer	Same as stamp duty	Up to 1%	Local	
	Withholding tax	Buyer and seller	Advance on other taxes due on property sales	2% (buyer); 1% (seller)	Federal	
Philippines	Local transfer tax	Seller	Fair market value of the property	0.5% (provinces); 0.75% (cities)	Local	Administered by the Bureau of Internal Revenue.
	Document stamp tax		Sales price of the property	1.50%	Central	
	Capital gains tax	Seller	Fair market value of the property	6%	Central	

(continued)

Table 2.7 Property Transfer Taxes and Other Fees and Charges on Land (*continued*)

Jurisdiction	Tax Type	Taxpayer	Tax Base	Tax Rate/Fee	Revenue	Comment
Singapore	Buyer's stamp duty	Buyer		1%–3% nonresidential; 1%–4% residential	Central	Differentiates by use.
	Seller's stamp duty	Seller		12%; 8%; 4%	Central	Resales year 1; year 2; year 3.
	Additional buyer's stamp duty	Buyer		12%–30%	Central	Only on second homes and residential investment property.
Taiwan	Deeds tax	Buyer	Sales value of buildings	6%	Central	In most cases, the base is the same as for the building tax.
	Stamp duty	Buyer	Sum of the bases of land value increment tax and deeds tax	0.1%	Central	
	Land value increment tax	Seller	Capital gain on land sale	Progressive rate schedule	Local	Relatively few taxpayers in the top bracket.
	Integrated real estate income tax	Seller	Capital gain on building sale	Progressive rate schedule	Central	Levied jointly with land value increment tax.
Thailand	Transfer fee	Buyer		2%	Local	Department of Lands collects and remits; often split between the parties.
	Stamp duty	Seller		0.5%	Local	Payable only if business tax is not payable.
	Special business tax			3.3%	Central and local	0.3% (i.e., 10% on the 3%) is a municipal tax.
	Withholding tax	Seller		Individuals: progressive rates from 5% to 35%; legal persons: 1%	Central	

Vietnam	Registration charge	Buyer	The higher of the declared sales price and the value in the land price table	0.5%	Local	The transfer value is determined on the basis of the land price table and housing price as stipulated by the provincial people's committee.
	Land use levy collected when land user rights are assigned by the government	Buyer	Government-estimated land prices or competitive auctions	Rate is based on land use, land area, and land prices	Local	The transfer value is determined on the basis of the land price table as stipulated by the provincial people's committee. Improvements are not included in the tax base.
	Land rental payment	Household, business, and organization	Land price tables or auction	Rate is based on land use, land area, and land prices		The rent is paid annually or prepaid in full for the whole duration of the lease term.

Source: Case studies in part 2 of this book.

Note: This table excludes value-added taxes and goods and services taxes on real property transactions.

adjusted declared price (as described later). A basic exemption from taxation of these transfers may be given, and a special rate may be imposed for certain types of transfers. For example, Singapore taxes second homes at a higher rate and taxes properties held for shorter periods at higher rates, and Taiwan and Korea impose a different rate structure depending on the number of houses owned. A separate regime is always in place for inherited properties.

One might expect that the legal structures of property transfer taxes and recurrent property taxes would overlap considerably. After all, they are both value-based taxes on real property. But with a few exceptions, there is not much overlap. When transfer taxes are levied against the declared value of the property exchange and the transfer tax rate structures are independently determined, the transfer tax can be very different from the recurrent property tax in a country. Sometimes the two taxes are imposed by two different levels of government.

Statutory Tax Rates

The level and structure of statutory tax rates differs widely among Asian jurisdictions. Among those that tax the total sales value of the transfer, it ranges from a 0.5 percent registration charge in Vietnam to 10 percent or more in Pakistan. The wide range of tax rates has several explanations. The tax might be set high to affect property sales, as in Korea, where the top rate in its progressive acquisition tax rate structure has fluctuated between 2.7 percent and 4.6 percent as the government has tried to cool down the housing market. Or the transfer tax rate may be set high to compensate for an expected underdeclaration of the sales base, as it might be in India and Pakistan.

Transfer tax rate structures can be complicated. For example, in Thailand, transfer fees are levied at 2.5 percent of the appraised value of the property being transferred, but if the seller is a company, the tax rate is 1 percent of the registered sale price or appraised value, whichever is higher. If the seller is a person and not a corporation, the withholding tax is calculated according to a progressive rate schedule based on the appraised value of the property. In the Philippines, tax rates differ between provinces and cities. Furthermore, some LGUs use zonal values as the basis of this tax, rather than the fair market value stipulated by law. Vietnam replaced the transfer tax on land use right with a capital gains tax, but it still collects a 2 percent tax if the capital gain cannot be accurately determined. Taiwan's tax increment levy imposes marginal rates ranging from 20 percent to 40 percent, but few taxpayers are in the top-rate bracket.

Administration

In Indonesia, the property transfer tax was enacted as a central-government tax but in 2011 was decentralized to the local level. In Japan, the prefectures levy the real property acquisition tax. In some jurisdictions, the transfer tax (or taxes) are levied and collected centrally, and in others, it involves tax sharing or even outright local-government administration. Either way, however, it can be a significant source of revenue for subnational governments. In India, stamp duty revenues are shared between the state government and large local (urban) bodies in some states; in others, municipal corporations levy a surcharge on the stamp duty collected by the state. Stamp duty and registration fee accruing to local governments in Delhi, India, account for 16 percent of the total revenues and are equivalent to about 70 percent of total recurrent property tax receipts.¹³

Valuation

Several different approaches are taken to value property transfers. Transfer taxes in many low- and middle-income Asian jurisdictions take the form of sales taxes, with the tax base self-declared and sometimes accepted without adequate verification. In jurisdictions where underreporting of values is likely to go undetected or unpunished and where the property transfer tax is levied at high nominal rates, property owners have a significant incentive to understate taxable value (Bahl 2004; McCluskey, Franzsen, and Bahl 2017b; Norregaard 2013). This leads to a revenue loss and, in some jurisdictions, also weakens the database that is necessary for objective assessment of the recurrent property tax (Bahl and Bird 2018).

Underdeclaration is a major issue for property transfer tax administration, and in many jurisdictions its resolution is not satisfactory. In some jurisdictions there is a provision for reassessment by a higher-level authority if the declared values are thought to be too low. In some cases, it is explicitly stated that the taxable value is that declared by the taxpayer, unless it is lower than an existing government-determined value for the property (Malaysia and the Philippines). But this becomes a vicious circle because the government value may itself have been partially determined by the underdeclared property transfer tax sales amount.

At the other end of the spectrum, in higher-income jurisdictions in Asia, third-party data are available to establish something closer to true market value for transferred properties. In Hong Kong, the large case load referred by the Stamp Office to the commissioner of Rating and Valuation for examination and valuation necessitates the use of CAMA techniques. Multiple regression analyses are applied to scrutinize the stated

consideration submitted by taxpayers in property sales transactions for stamp duty purposes. In 2017–2018, 8.6 percent of the valuations received were for transactions with no or inadequate consideration.

Preferential and Punitive Treatment

Some of the problems with property transfer taxes parallel those of recurrent property taxes. Jurisdictions build complicated rate structures, preferential assessments, and base exclusions into the system with the intention of influencing choices and affecting the allocation of resources. These distortions may or may not be consistent with the discretionary choices made for the recurrent property tax. The same may be true for the vertical equity features built into the property transfer tax. There are many examples of this in the case studies here.

Some transfer tax systems provide for tax rate differentiation on the basis of use, mostly between residential and nonresidential property (e.g., China, Hong Kong, Malaysia, and Singapore). Additional relief is granted for smaller residential units. In Hong Kong, steep increases in property values after 2010 prompted the government to intervene. First, stamp duties were added to address the considerable rise in property values. Second, different tax rates were applied—depending on whether the buyer is a Hong Kong permanent resident or a company and whether the property is residential or nonresidential. Similarly, Singapore provides relief by applying a sliding scale (of 1–3 percent) to residential property acquisitions, and it also introduced an additional stamp duty on buyers of second homes or of residential investment property. In both Hong Kong and Singapore, stamp duties have been added for resales that occur within three years in an attempt to curb speculation in the residential property market.

In China, the farmland occupancy tax, which is akin to a development charge, is a one-time charge levied at differential rates (based on the area occupied) on entities and individuals who construct improvements on arable land to be used for nonagricultural purposes. The Chinese land appreciation tax (also a one-time charge) is structured more to deter property speculation than to raise revenues for local governments. Its progressive tax rates apply at four levels, rising from 30 percent to 60 percent. The incremental value is the total income from the property transfer minus the costs paid by the transferor for the land use rights, land development and structure construction, and tax payments related to the transfer.

Indonesia and Japan tax property transfers above a threshold value. Although the standard tax rate in Japan is 4 percent, the rate for land and

residential buildings has temporarily been reduced to 3 percent. Various tax rates—ranging from 1 to 4 percent—are applied for the acquisition tax in Korea, depending on the type of property.

Impacts

Property transfer taxes have many features that must be taken into account in evaluating their effectiveness as a local-government revenue source. Some of these are offsets against the strengths of the recurrent property tax, and some are reinforcing.

As shown in the case studies in part 2, transfer taxes can be revenue productive, as in Hong Kong, Singapore, and Korea. Moreover, they are characterized by a high rate of voluntary compliance. In low-income jurisdictions, the ratio of transfer tax to recurrent tax revenue is less impressive. In the former socialist economies (China and Vietnam), where land is owned by the government, an effective, broad-based system of recurrent property taxation does not exist, and most revenue is derived from transfers of user rights, land use levy, and land rental. Because land is owned by the nation-state, there is not the same problem with determining values.¹⁴

A disadvantage is that property transfer tax revenues are prone to volatility, responding sharply to business and housing market cycles. This is, for example, evident in India where a slowdown in the property market was reflected in a declining percentage of the share of stamp duty receipts in the total revenues of the Delhi government. This volatility in the revenue flow is a negative factor from the vantage of local governments, which deliver essential services but have only limited borrowing power. However, it should be noted that in many instances property transfer tax revenue is already shared with local governments and they have been living with this volatility.

The property transfer tax imposes a cost on property transactions, thereby reducing the volume of formal transactions and slowing the development of the real estate market. Higher transfer taxes are levied to address growing housing prices. The recurrent property tax, in contrast, shows a stable pattern of revenue growth, which is in step with what is needed to deliver essential services.

The transfer tax and the recurrent property tax share a major problem. The base of both taxes is compromised by underdeclaration of transaction values for the former and undervaluation of land and property for the latter. The result is that neither tax reaches its revenue potential, particularly in the lower-income jurisdictions where assessment rates and tax morale are often low.

Finally, some jurisdictions impose multiple levels and layers of property transfer taxes (e.g., the Philippines), which can significantly raise the overall effective tax rate on some transferred properties. This may yield cascading taxes that further increase the risk of tax evasion behavior (Wallace 2018). Other nontax transaction fees associated with property transfers include registration fees, notary fees, and estate agent fees. These third-party fees sometimes include the value-added tax (Franzsen 2020).

Capital Gains Taxes

Some of the 13 jurisdictions under study here have at some point introduced a form of capital gains tax.¹⁵ That is, the tax base is the difference between the gross income realized from selling the property (or the user right) and the total of the original purchase price, the total of the tax payments made at the time of transfer, and other allowable costs. In some jurisdictions, a separate capital gains tax is imposed on real property transfers under the national income tax.

The actual practice varies from jurisdiction to jurisdiction. Malaysia's real property gains tax is the sole tax on capital gains. It is imposed primarily to control property speculation, rather than to tax unearned increments in land values or to increase the supply of land for development. In India, the capital gains tax is levied and collected under the Income Tax Act by the central government. The act provides that long-term capital gains arising from transfer of a residential property may be exempted from income tax if the capital gain is used to acquire or construct another residential home within a specified period. In Pakistan, the capital gains tax is a federal tax payable by the seller on any capital gain realized, at a tax rate of 10 percent if realized within one year, 7.5 percent if sold during the second year and 5 percent if sold during the third year. These gains are calculated according to the fair market value, which is based on the Federal Bureau of Revenue's valuation tables rather than actual contractual prices.

Taiwan's version of a capital gains tax is different in that the original purchase price is approximated by a percentage of assessed value as determined by higher-level government valuers. The tax liability for both land value increment tax and integrated real estate income tax under a property sale is with the seller. Acquisitions and transfers of user rights in Vietnam are taxed or charged in several ways. The most revenue productive is a land use levy on the assignment of property rights by government. Land leases and rentals may be assessed as a one-time or an annual charge and yield a significant amount of revenue. There is also an income tax on real estate transfers by individuals and corporations. The tax for individuals is

based on the realized sales price of the asset; for corporations, on capital gains.

Should Transfer Taxes and Recurrent Property Taxes Be Part of the Same System?

Transfer taxes and recurrent property taxes could be brought closer together by administering them jointly and by harmonizing their rate and base structures. The present system of policy and administrative separation in many Asian jurisdictions has led to two parallel property tax systems that do not always reinforce one another. Together, they generate significant revenues, but they can pursue different equity outcomes with their rate and base features, and they both have features that can affect land use.

A reform program to make land and property taxation a more productive instrument of public policy might be the following: First, convert the present transfer tax to something like a capital gains tax. With a capital gains tax, at least the buyer has an interest in declaring the true market value, because underdeclaration will deflate the property's base cost when sold. This self-checking feature should effect a more accurate self-declaration of sales prices, thereby improving the database for recurrent property tax valuation (Bahl and Wallace 2010). However, capital gains taxes impose administrative burdens, especially in establishing the basis for the tax, developing an index for inflationary increases, and adjusting for qualifying investments in real property (Wallace 2018). The richer jurisdictions in Asia have dealt with these issues, but the poorer ones would need to start with a simplified version.

Second, the governance issue surrounding transfer taxes might be resolved by defining a basic and a surtax, with the former being part of the recurrent property tax and the latter under the control of the unit of government charged with macroeconomic policy. However, all revenues raised would be recurrent property tax revenues. The new transfer tax would be administered jointly with the recurrent property tax. Under this arrangement, and with appropriate penalties for underdeclaration and an effective valuation monitoring system in place, the transfer tax can be designed such that voluntary disclosure of the actual price or market value is less likely to be undermined. In addition, introducing a value-threshold exemption (Indonesia) or a tax rate of 0 percent below a specified value threshold (as is done in South Africa) could be methods of achieving this objective. A realistic value threshold, especially if coupled with a zero rate and effective monitoring, should not discourage the transfer of properties below the threshold value and could make it easier for first-time buyers to enter the formal property market.

Equity and Allocative Effects

Reforms of the recurrent property tax structure are mostly driven by revenue considerations. But most property tax systems include features that are designed to influence the distribution of tax burdens and to support land use policies. These nonrevenue objectives are important because they can be instrumental in gaining more acceptability for the property tax and possibly promote sustained and more fair economic growth. The basic approach to addressing equity and land use issues is typically spelled out in the property and land tax laws, but economic development has given rise to special issues that also have been addressed.

Sometimes reforms are championed by social engineers who have good intentions about making tax burdens more equitable, making land use patterns more beneficial to society, or even cooling down an overheated property market. Other times the reasons are more nefarious. Sometimes reforms are based on hard evidence about the potential impacts, and sometimes they are not.

As the preceding sections of this chapter make clear, Asian property taxation systems differ from country to country, and there is no single common practice. Even the reforms are undertaken in different ways, often using a combination of rate and base structure and valuation to address the same question. Some skeptics might argue that this shotgun approach is likely to make the system more complicated and more costly to administer. Others say it is the only way to achieve the objective sought. The fact is that property tax structures change over time and in piecemeal ways as reformers attempt to make them more equitable and more friendly to good land use patterns.

Equity

A good property tax spreads the burden across taxpayers in ways that are in step with social norms in the country. Jurisdictions differ on how they state this objective, but its essence is usually that the tax will not bear heavily on low-income households and sometimes even that higher-income households will be singled out to bear more of the burden (see box 2.3). Two kinds of equity are discussed here. Vertical equity refers to the property tax burden rising with income level. Horizontal equity refers to the property tax falling equally on persons and businesses who are in the same circumstances. For a good discussion of equity in property taxation, see Youngman (2016, chap. 2). As shown in part 2, some jurisdictions have introduced progressive features, which indicates a concern for vertical equity. However, these reforms have not always led to a more progressive

distribution of property tax burdens. In fact, in numerous cases jurisdictions have introduced progressive rates and simultaneously introduced regressive owner-occupier exemptions.

Some examples of the measures taken by Asian jurisdictions to make land and property taxes more horizontally and vertically equitable are outlined in table 2.8. But because empirical research on the distribution of property tax burdens is scarce, we can make only subjective judgments about the possible intent of the specific interventions summarized in the table. Note that the table explores only the *marginal effects of single actions* and not the offsetting (or reinforcing) effects of other elements of the property tax structure—for example, it does not address the possibility that the marginal effects of a progressive rate structure may be more than offset by exemption policies and assessment practices (see boxes 2.1 and 2.2). Neither does the table recognize the possibility that those who design these equity packages rely on notional evidence about what makes a property tax more equitable.

BOX 2.3 IS THE PROPERTY TAX BURDEN DISTRIBUTED EQUITABLY IN LOW- AND MIDDLE-INCOME JURISDICTIONS?

Equitable distribution has been a focus of research, especially with respect to higher-income jurisdictions and regions where the tax is levied at a higher effective rate. The general conclusion of the theoretical research, which admittedly makes some very simplifying assumptions, is that the property tax is borne by owners of capital and tends to be progressive (Zodrow 2006). The theoretical model of property tax incidence has also been studied for the special case of low- and middle-income jurisdictions, and here the conclusion of progressivity is less easy to reach, particularly because of assumptions that property taxes are national and about the supply and mobility of capital (Bahl and Linn 1992, chap. 5). Moreover, none of the theoretical models address the implications of the very different rate and base provisions that jurisdictions (or local governments in those jurisdictions) introduce to make the property tax more progressive. But the plethora of progressive rates, exemptions, and thresholds that favor low-income families and preferential assessment practices have convinced many that the property tax is progressive in its distribution of burdens (Birdsall and Gupta 2018). The view here is that the best way to understand the distribution of tax burdens is on a jurisdiction-by-jurisdiction approach. This is, sadly, not often attempted (Alleyne, Alm, Bahl, and Wallace 2007).

Table 2.8 Features Affecting Distribution of Property Tax Burdens

Jurisdiction	Structural Feature	Intended Marginal Impact	Comment
China	Higher tax rates for commercial and industrial property	Progressive	Most property tax revenues come from transfers of land user rights.
	Tax preferences for first-time home buyers	Progressive	
Hong Kong	Threshold exemption level	Progressive	Less than 2% of all assessments are exempt.
	Progressive statutory rates, additional stamp duties, with some exemption for first-time home buyers	Progressive	Levied to control speculation.
India	No revaluation of unit-area value system since 2005; no indexation has been allowed	Regressive	Less than one-fourth of properties are in the taxpaying population.
Indonesia	Threshold exemption level	Progressive	The threshold exemption is not rigidly enforced.
	Property transfer tax	Progressive	Declared value of the transaction is most often the base.
Japan	Indexed valuation adjustments	Correct outdated assessments	
	Threshold tax liability	Progressive	Residential land is assessed at one-third of full assessed value.
	Classified property assessment ratios	Progressive	

Korea	Graduated rate schedule under all three types of property taxes	Progressive	
	Wealth tax on total holdings of property, levied with a progressive rate schedule	Progressive, but burdens some taxpayers; also a high property value threshold introduces a regressive element	Wealth tax liability is concentrated in higher-income brackets, but only a small proportion of landowners are covered.
	Fractional assessments	Progressive	Differential assessment rates by use of property.
Malaysia (Kuala Lumpur)	Higher tax rates on commercial and industrial property	Progressive	
	Lower rate on low-income apartments	Progressive	
Pakistan	Preferential treatment of owner-occupiers vs. renters	Regressive	
	Tax on luxury housing	Progressive	
	Capital gains tax	Progressive	
	Threshold exemption based on lot size	Progressive	2% of landowners own 30% of the land.
Philippines	Properties below a minimum threshold value are exempt from taxation	Progressive	
	Sectoral assessment ratios	Progressive	Residential ratio is 20% and commercial-industrial is 50%.

(continued)

Table 2.8 Features Affecting Distribution of Property Tax Burdens (*continued*)

Jurisdiction	Structural Feature	Intended Marginal Impact	Comment
Singapore	Property tax surcharge earmarked for social housing	Progressive	
	Discretionary relief can be granted by the president or the local council	Varies by case	Special relief is granted to some companies or under tax holidays.
	Minimum value exemption	Progressive	20% of owners of subsidized housing pay no tax; property tax from subsidized housing is only 2.8% of total.
	Lower tax rates on subsidized housing	Progressive	Punitive rates of property tax and stamp duties.
Taiwan	Progressive tax rate schedule	Progressive	
	Higher tax rates on land than improvements, and a progressive rate structure	Progressive (% of income paid in taxes rises as income rises)	Small proportion of taxpayers are in highest rate bracket.
	Land tax base is total holdings of land in the jurisdiction by each owner	Discourage concentration of land ownership	Effective tax rates may be very low.
	Capital gains (land value increment tax) rate structure is progressive	Progressive	

Thailand	Threshold exemption level	Regressive	Threshold exemptions are very high, and many higher-income owners are exempt from tax.
	Higher tax rates for commercial and industrial property	Progressive	
	Graduated rate schedule	Progressive	
Vietnam	Base for recurrent, nonagricultural tax is total (national) landholdings by each individual or company	Progressive	
	Extensive preferential treatments for land taxes	Unclear	About 75% of exemptions are for vacant land.
	Tax rates are graduated above a standard land area threshold	Progressive	
	Threshold for payment of annual recurrent property tax exempts about 75% of households	Progressive; reduce administrative costs	Threshold is set by law at about half the actual tax burden.

Source: Case studies in part 2 of this book.

Asian property tax systems use different approaches to lower the tax burden on low-income households. Most adopt a threshold housing value (or a threshold tax liability or even a threshold space level) below which no property tax is charged (Hong Kong, Singapore, and the Philippines). Malaysia gives a preferentially lower tax rate to low-income flats. Another approach is to tax higher residential property values at higher rates, such as might result from a graduated rate structure, a luxury house tax rate as in Pakistan, a wealth tax on all landholdings as in Korea and Vietnam, or the imposition of a land value increment tax as in Taiwan. The most common approach is to impose a graduated rate schedule, but here the results depend on how taxpayers are distributed among the rate brackets. For example, the Taiwan case study shows that less than 1 percent of taxpayers are in the highest tax bracket, thereby limiting the overall progressivity.

Another general approach to addressing equity in land and property taxation is to group taxpayers according to the classification given to their properties and to tax each class of property differently. Many systems assume that commercial and industrial property have more taxpaying capacity and assign them higher burdens (and lower burdens on the agricultural and residential sectors because they are deemed to have a lower taxpaying capacity).¹⁶ This is done in some jurisdictions with differential tax rates (Malaysia) and in others with differential assessment ratios (Philippines).¹⁷ The flaw in this approach is that it ignores the shifting of tax burdens. For example, depending on market conditions, the burden of a higher property tax on commerce or industry might be shifted forward to consumers, shifted backward to labor, or borne by the owners of the business. A better approach would be to adopt a uniform assessment ratio, as is done in Hong Kong, and to let the difference in the value of the property be the guideline for capacity to pay.

Finally, there is the burden of property transfer taxes, stamp duties, and capital gains taxes. These are generally imposed on all transfers of property, whether made by individuals or corporations. The subject of who bears the burden of such taxes is complex. The general presumption is that such taxes are capitalized into the value of the asset being transferred and that the burden is distributed, depending on market conditions, between buyer and seller. To the extent that land and asset ownership is concentrated at the high end of the income distribution, the burden of the tax is progressive.

Land Policy and Land Use

Interest in land policy has been heightened by the accelerating pace of urbanization and the growing need for infrastructure. Clearly, Hong

Kong and Singapore are good examples of addressing and providing solutions for land scarcity through vertical development above- and belowground. Many Asian governments, therefore, use land and property taxes as a component of their ongoing programs to help control and direct land use and land markets. Some of these land and property tax interventions are summarized in table 2.9. We can flag governments' intentions for these policy measures, but we cannot address the more important question of the impact of these policies. This knowledge is bedeviled by the absence of a strong body of research in almost all jurisdictions.

Asian jurisdictions are using land and property taxes to achieve land policy objectives to address nonrevenue issues. China and Vietnam are concerned about the implications of urban growth for farmland preservation, Hong Kong and Singapore harmonize tax policy and land use policy, Malaysia differentiates its property tax regime within Kuala Lumpur according to the degree of urbanization, and Indonesia and Japan encourage certain kinds of investment in land and property. The social engineers in these jurisdictions have been as active in using property taxes to support land policies as they have been in introducing equity policies.

Four objectives seem to have guided the practice. The first is to encourage better uses of land. Taiwan has established a split-rate tax system with a heavier rate on land than improvements, following Henry George's ([1879] 1958) long-lived maxims about land taxes.¹⁸ Hong Kong has proposed a new tax on open land. Vietnam, Taiwan, and the Philippines also have taxes on open land (but these taxes are underused and not all have worked well). Japan has introduced property tax incentives to encourage more efficient use of land and to produce higher-quality housing.

The second objective is to discourage and control land speculation. Urbanization in Asia has led in several areas to boom-and-bust cycles in property prices, and tax policy has been used to control speculation. China, Hong Kong, Korea, and Singapore have all used capital gains and property transfer taxes to smooth prices in real estate markets.

The third is to establish more transparent property markets. Some jurisdictions (for example, Singapore, Hong Kong, Japan, and Taiwan) have succeeded. Others still need to manage data flows, establish clear ownership records, and improve compliance.

The fourth is to establish innovative financing schemes to improve services or amenities and therefore the efficient use of the land. Singapore has had success with development charges. Other attempts include property tax revenues earmarked for social housing in the Philippines and Japan's

Table 2.9 Features Affecting Land Use and Property Markets

Jurisdiction	Structural Feature	Intended Marginal Impact	Comment
China	Tax on farmland buildings not in agriculture use (no tax is imposed on rural buildings)	Preserve farmland	Prices for urban land are driven up by limited supply available for commercial and residential uses.
	Transfer tax on appreciation of land use value	Discourage speculation	Levied at progressive rate.
	Land concession revenue	Fund local infrastructure	
Hong Kong	Vacant unused land is untaxed	Reduce efficiency of land use	Vacant property surtax has been proposed.
	Additional stamp duty on transactions	Reduce speculation	Levied at progressive rate.
Indonesia	Lower property transfer tax rate for real estate investment trusts	Encourage investment in real estate	Property transfer rate is 5%, preferential rate is 1%.
Japan	Special property tax on floor space and number of employees in cities	Compensate for pressures of urbanization	Smaller businesses are exempt.
	Implement strategies to improve ownership records	Enable better land management	
	Incentivized assessment policies	Promote better lot size choices, better-quality housing	
	Tax reduction for newly built homes	Encourage new residential housing	50% property tax reduction for first three years.

	Vacant land tax	Stimulate removal of unused properties	Increases assessment level sixfold.
	Tax burden adjustment mechanisms	Control speculation	Adjust taxable values to reflect property price increases.
	Higher taxes on unused farmland	Preserve farmland	
Korea	Urban areas taxed more heavily	Reflect benefits from better public services	Special property tax sur-rate of 0.14% for cities.
	Wealth tax levied on total national landholdings	Control land speculation; reduce the concentration of land and housing ownership	Levied only on a small fraction of the population.
	Undervaluation	Provide an incentive to hold properties off the market	
Malaysia	Real property capital gains tax	Control speculation	Top rate is 30%.
Kuala Lumpur	Lower tax rate on vacant properties	Reduce incentive for development	
Kuala Lumpur	Higher tax rates in central locations	Reflect access to services and amenities with a surcharge	
Philippines	Tax on idle lands	Improve efficiency of land use	Rarely used.
	Betterment levies	Capture value for infrastructure finance	Rarely used.
Singapore	Additional stamp duty	Discourage land banking	Higher taxes on rented properties to encourage owner occupancy.
	Development charge on land use changes	Capture value	

(continued)

Table 2.9 Features Affecting Land Use and Property Markets (*continued*)

Jurisdiction	Structural Feature	Intended Marginal Impact	Comment
Taiwan	Split-rate property tax system with a higher rate on land	Reduce penalty on investing in improvements, improve efficiency of land use	
	Land value increment tax	Discourage speculation, return unearned increment to the public	Tax rates range from 20% to 40%.
	Tax on idle land	Improve efficiency of land use; discourage speculation	Idle land tax is rarely used.
	Land tax base is total holding of land in the taxing jurisdiction	Break up concentration of land ownership; discourage speculation	
Thailand	Outdated valuation roll still in effect	Encourage holding unproductive land	New property tax regime was introduced in 2020.
	Higher tax rate on vacant land	Encourage more efficient land use	Land prices are rising faster than the penalty rate.
	Low tax rates and low coverage of tax base	Discourage more efficient land use and encourages speculation	
Vietnam	Higher tax rates for vacant land	Improve efficiency of land use	Effective property tax rates are very low.
	Transfer tax on user rights to land does not include improvements	Encourage more intensive land use	
	Penalty rates for underused and larger landholdings	Discourage speculation; encourage earlier development of properties	

Source: Case studies in part 2 of this book.

business occupancy tax, which offsets the costs of urbanization (McCarthy 2021).¹⁹ Much more could be done with value capture, which is still rarely used in Asia (Smolka 2013). Many Asian jurisdictions use their land and property tax regime for better land use, and for value capture, but these methods have not yet gained wide acceptance in the region.

Notes

1. To simplify the presentation, we do not explicitly include the coverage of the tax base in this equation.

2. The annual rental value system was introduced by the British during colonial times and is still in effect in other jurisdictions in Asia, such as Hong Kong, Malaysia, Pakistan, and Singapore.

3. It also, arguably, bypasses rent control ordinances when assessing taxable property values. For a discussion of the unit-area value system in India, see Rao (2008).

4. Tracking the revenue cost of tax relief is difficult. It would involve measuring revenues from the tax against a hypothetical counterfactual system with no tax relief measures. We know of no country that does this, though some do attempt to measure the tax expenditures for selected relief programs.

5. The idea of a progressive statutory rate structure being a fair way to tax property ownership has complicating issues. For a good discussion, see Youngman (2016, 25–27).

6. In some countries and jurisdictions, these progressive rate structures are set up as slabs (property value groupings) with marginal tax rates, and in others they increase average tax rates with the total value of the property.

7. In Vietnam, the cost of a Big Mac in 2021 was about USD 3. Have it with fries and a drink and this claim might be about right (Szmigiera 2021).

8. These factors include (1) type of subnational government—e.g., province or city (Philippines); (2) urban or rural location (Korea and Malaysia); (3) property type—i.e., land or buildings or both (Taiwan); (4) property use—e.g., residential or commercial (Malaysia and Thailand); (5) classes of property within use categories, such as retail or office (India); (6) value (Indonesia); (7) property size (China, Pakistan, and Vietnam); (8) population size (China); and (9) occupancy (Pakistan and Thailand).

9. The International Association of Assessing Officers (IAAO 2014) defines an automated valuation model as a computer program for property valuation that analyzes data using an automated process such as multiple regression. Computer-assisted mass appraisal is an integrated system for valuing property. The system typically has modules such as property data (textual), spatial data, and transaction data and statistical models that use multiple regression techniques, geographic weighted regression, and boosted regression trees.

10. IPTI (2021) defines artificial intelligence (AI) as machine learning (ML) designed to predict an outcome or provide an estimate of value, e.g., most probably sales price.

11. The taxpayer calculates only assessed value using the valuation and rate schedules provided in the self-assessment forms.

12. Legal liability for payment of the transfer tax may rest with the buyer or with the seller or it may be split between them. In most systems covered in this book, the legal responsibility is with the transferee (China, Japan, Korea, Malaysia, Pakistan, and Vietnam). However, when evaluating the burden of transfer taxes, it is not important who bears legal liability for making the tax payment. Where the final burden rests, i.e., the *incidence* of the tax, is important.

13. In Delhi, India, stamp duty rates differ by gender: 6 percent for males and 4 percent for females.

14. Under the Constitution of China, urban land is owned by the state, and rural land by the village collectives. The amended Land Administration Law of 2020 gave village collectives more control over the sale of their user rights.

15. The definition of property transfer taxes used here is the recurrent and nonrecurrent taxes on the use, ownership or transfer of properties. Sometimes, OECD, IMF and countries make different decisions about how to classify taxes. For example, OECD (2021, pp 166) notes that a transfer tax on immovable property that is based on profits made from the sale is classified as a capital gains income tax and not as a property tax.

16. This assigning of different burdens to commercial and industrial property and to agricultural and residential sectors might also be done to protect revenues, because the compliance rate might be higher in the commercial and industrial sectors.

17. Properties might be classified in other ways, for other purposes. For example, owner-occupiers are often given preferential treatment (Pakistan), presumably to encourage owner occupancy.

18. The 19th-century social philosopher Henry George argued for a land tax and had a significant influence on thinking about how property tax systems should be shaped. See Netzer (1998) and Franzsen (2009).

19. According to McCarthy (2021, 3), "The World Bank estimates that more than US\$90 trillion in new infrastructure will be needed by 2030 to prepare cities for 2 billion new inhabitants, primarily in sprawling metropolises in low-income countries."

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