THE GLOBAL URBAN ECONOMIC DIALOGUE SERIES

# PROPERTY TAX REGIMES



# **PROPERTY TAX REGIMES** IN EUROPE

United Nations Human Settlements Programme Nairobi 2013



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#### The Global Urban Economic Dialogue Series

Property Tax Regimes in Europe

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## FOREWORD



Urbanization is one of the most powerful, irreversible forces in the world. It estimated that is 93 percent of the future urban population growth will occur in the cities of Asia and

Africa, and to a lesser extent, Latin America and the Caribbean.

We live in a new urban era with most of humanity now living in towns and cities.

Global poverty is moving into cities, mostly in developing countries, in a process we call the *urbanisation of poverty*.

The world's slums are growing and growing as are the global urban populations. Indeed, this is one of the greatest challenges we face in the new millennium.

The persistent problems of poverty and slums are in large part due to weak urban economies. Urban economic development is fundamental to UN-HABITAT's mandate. Cities act as engines of national economic development. Strong urban economies are essential for poverty reduction and the provision of adequate housing, infrastructure, education, health, safety, and basic services.

The *Global Urban Economic Dialogue* series presented here is a platform for all sectors of the society to address urban economic development and particularly its contribution to addressing housing issues. This work carries many new ideas, solutions and innovative best practices from some of the world's leading urban thinkers and practitioners from international organisations, national governments, local authorities, the private sector, and civil society.

This series also gives us an interesting insight and deeper understanding of the wide range of urban economic development and human settlements development issues. It will serve UN member States well in their quest for better policies and strategies to address increasing global challenges in these areas.

oml **Joan Clos** 

Under-Secretary-General of the United Nations, Executive Director, UN-HABITAT

PROPERTY TAX REGIMES

# CONTENTS

LIST OF TABL	ES, FIGURES, ACRONYMS AND ABBREVIATIONS	VIII
CHAPTER 1	INTRODUCTION	1
Types of <sup>-</sup>	Taxes on Property	1
Why Con	sider a Property Tax?	1
Scope and	d Approach	2
CHAPTER 2	THE ORGANIZATION OF REPORT	3
CHAPTER 3	OVERVIEW OF PROPERTY TAX REGIMES IN EUROPE	5
Brief Hist	ory	5
Current S	ituation	6
Re	current taxes on immovable property	6
Та	xes on net wealth and property transfers	11
CHAPTER 4	STATISTICS OF UTILIZATION OF TAXES ON PROPERTY	13
CHAPTER 5	FISCAL ARRANGEMENTS	17
Power of	Taxation, Revenue Assignments, and Local Discretion	17
CHAPTER 6	RATE SETTING APPROACHES AND RATE STRUCTURES	21
Other Fis	cal Issues	22
CHAPTER 7	MAIN DESIGN FEATURES	23
Responsit	pility for Paying the Property Tax	23
Taxable P	roperty	24
Ba	sis of Assessment	25
No	on-value	25
Va	lue 25	
CHAPTER 8	STRATEGIES FOR PROVIDING SELECTIVE PROPERTY TAX I	RELIEF27
Different	ials	27
Personal	Exemptions and Similar Relief Measures	29
Deferrals	and Abatements	29
Freezes a	nd Limits	33

Institution	al Exemptions	33
Incentives	and Disincentives	34
Other Forr	ns of Relief	36
Economic,	Fiscal, and Administrative Considerations	37
CHAPTER 9	ADMINISTRATIVE ARRANGEMENTS, PRACTICES AND ISSUES	39
Functional	Assignments	39
Sup	pervision	42
Ass	essment and valuation	42
Bill	ing, collection, and enforcement	43
Арј	peal	43
The	e role of taxpayers and self-assessment	44
Priv	vate sector roles in property tax administration	45
Cadastral S	Systems	45
Valuation	system	51
Val	uation assumptions	52
Me	thods and procedures	53
Coo	dification of valuation methods	53
Spe	cial valuation issues	53
Rev	valuation	54
Ass	essment and Collection	54
Bill	ing 55	
Col	lection	55
Enf	orcement	55
Administra	ation of Appeals	56
Resource F	Requirements, Performance Measures, and Achieving Cost-effectiven	ess57
Fur	nding	57
Sta	ffing	58
Тес	hnology	58
CHAPTER 10	CONCLUSIONS AND RECOMMENDATIONS FOR IMPROVING PROPERTY TAX REGIMES	61
Reform St	rategies	61
Performar	nce Analysis	61
Obstacles <sup>-</sup>	to Frequent Revaluations	62

#### **REFERENCES** 65

#### APPENDICES 71

# LIST OF TABLES, FIGURES, ACRONYMS AND ABBREVIATIONS

#### LIST OF TABLES

Table 1:	Property Taxes Imposed and Distribution of Property Tax Revenues	7
Table 2:	Base and Basis of Taxes on Immovable Property	9
Table 3:	Taxes on Property as a Percent of GDP, Total Revenues, & Total Taxes	13
Table 4:	Recurrent Taxes on Immovable Property as a Percent of GDP, Total Local Revenues, and Total Local Taxes	15
Figure 3:	Recurrent Taxes on Immovable Property as a Percent of Total Local Taxes	16
Table 5:	Local Government Discretion Regarding Immovable Property Taxes	18
Table 6:	Differentials and Residential Property Tax Relief Measures	29
Table 7:	Unusual Institutional Exemptions	34
Table 8:	Property Tax Deductibility	36
Table 9:	Administrative Arrangements for Assessment and Collection	39
Table 10:	Information about Cadastral and Valuation Systems	46
Table 11:	Interplay among Values, Tax Rates, Taxes, & Taxes at Stake with a 10% Error	52

#### LIST OF FIGURES

Figure 1:	Relative Importance of the Types of Taxes on Property	14
Figure 2:	Utilization of Types of Taxes on Property as a Percent of Total Taxes on Property	14

#### LIST OF TERMS/GLOSSARY1

Cadaster (or cadastre), fiscal	the land, building, and person record system used in the administration of property taxes.
Cadaster (cadastre), legal	the system linking property to rights holders
Effective tax rate	in property taxation, the property tax obligation expressed as a percentage of the property's current market value (the effective property tax rate for a property worth $\leq 100,000$ that was taxed $\leq 1,000$ is 0.01 or 1 percent).

<sup>1</sup> Also see Organisation for Economic Co-operation and Development, 2010, Glossary of tax terms.

Property, immovable	rights to land, buildings, and other improvements to land (real property)
Property, movable	rights to property that is not immovable property (personal property)
Property tax	one of several categories of taxes that is based on the ownership, use, or transfer of property. See property, immovable, and property, movable.
Real estate	the physical land and buildings associated with immovable property

#### ABBREVIATIONS/ACRONYMS

CAMA	Computer-assisted mass appraisal
EU	European Union
GDP	Gross domestic product
GFS	Government Finance Statistics (an annual publication of the International Monetary Fund)
GIS	Geographic information system
IAAO	International Association of Assessing Officers
IMF	International Monetary Fund
MF	Ministry of Finance
OECD	Organisation for Economic Co-operation and Development
UN	United Nations

# CHAPTER 1 INTRODUCTION

This report surveys European property tax regimes. It thematically discusses policies and practices integral to these regimes; it is not a comprehensive catalog of the details of national property tax regimes. However, it attempts to identify the strengths and weaknesses of the various features of property tax systems. It examines patterns in revenue statistics. A focus is on the use of property taxes to finance local government.

#### **Types of Taxes on Property**

This report focuses on *recurrent* (that is, annual) taxes on *immovable property*. "Immovable property" generally encompasses both "real property" and "real estate," terms that have different technical meaning but that often are used synonymously. (Real property refers to the rights, interests, and benefits connected with real estate, which is the physical piece of land and any structures on that land. Land, in turn, can have the same meaning as real estate.)

Much of the literature on national property tax systems speaks generally of "property taxes." Particularly when considering property tax revenues, it can be important to distinguish among the various kinds of taxes on property. The International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD) have developed largely complementary schemes for classifying taxes, which they use in presenting revenue statistics. Taxes on property include: (1) recurrent (annual) taxes on real (*immovable*) property, (2) recurrent taxes on net wealth, (3) taxes on estates, inheritances, and gifts, (4) taxes on financial and capital transactions (including real property transfers), (5) other non-recurrent taxes, and (6) other recurrent taxes on property (including taxes on movable property such as vehicles and machinery and equipment).<sup>1</sup> See the Appendix, IMF and OECD Systems for Classifying Taxes. As noted the focus of this report is on the first category of property tax. (The European Union employs a different system of classification see European Union 2011, p. 377. Nations can have different ways of classifying taxes, and it is not always possible to reconcile the differences in statistics.)

As will be seen, many countries do not have a uniform national property tax system.

Several have separate land and building taxes. Several essentially let local governments tailor their systems to local conditions.

#### Why Consider a Property Tax?

Public finance experts regard taxes on immovable property as a suitable source of revenue for local governments. They also believe that they contribute to a wellbalanced revenue system. Revenue systems that include a mix of taxes and other sources of revenue make it easier to find a balance among competing policy objectives, weather economic difficulties, and compete effectively in the global economy.

Immovable property taxes are suited to local governments because it is clear which

Other main categories of taxes in the IMF scheme include taxes on income, profits, and gains; taxes on payroll and workforce; taxes on goods and services; taxes on international trade and transactions; and other taxes.

government is entitled to the tax revenue from immovable property, and such property cannot flee the tax collector. Local government services often are provided to properties or their owners and occupants. The tax captures for local government some of the increases in the value of land that are partially created by public expenditures. A dedicated source of revenue promotes local autonomy. The visibility of property taxes focuses attention on the overall quality of governance and promotes accountability. Information on land, buildings, and market prices collected in the course of administering taxes on immovable property becomes part of a valuable fund of information that has numerous governmental and private uses. If up-to-date and publicly available, this information can facilitate orderly real property markets.

Despite their advantages-or perhaps because of some of them-property taxes often are underutilized sources of revenue. A common, but disputed complaint about the property tax is that it is inherently regressive, although poorly administered property taxes tend to be regressive. People schooled in income and consumption tax administration can fail to appreciate the relative advantages of a wealth tax. They focus on high administrative costs and low yields, overlooking the comparative high compliance costs associated with income and consumption taxes. Valuers traditional single-property schooled in valuation methods disdain assessors and the mass valuation methods used in property taxation. The unpopularity of property taxes, coupled with opposition from taxpayers who benefit from entrenched inequities encourages "legislative neglect."

## Scope and Approach

In addition to countries within the traditional boundaries of Europe and countries spanning Europe and Asia (Kazakhstan, Russia, and Turkey), the report includes Armenia and Georgia. Some small states (Andorra, Liechtenstein, Monaco, and Vatican City State) are excluded. Altogether, forty-six states are included. These are listed in Table 1.

This survey extends the author's earlier survey of European property tax systems that was made for the Ministry of Finance of the Republic of Slovenia (Almy 2001) by drawing upon works in English that were not available at the time. These include Brown and Hepworth (2002); Federal Land Cadastre Service of Russia (2001); and Yuan, Connolly, and Bell (2009)-see references. Also consulted were forty-four country reports in the World Bank's "Doing Business" website (Malta and San Marino are not covered) and the International Monetary Fund's 2010 annual report, Government Finance Statistics (GFS, IMF 2010). The Doing Business reports provide some insights into taxes on property that businesses face. GFS provides a context for evaluating how countries use the various categories of taxes on property. However, the 2010 edition of GFS did not contain statistics for Bosnia-Herzegovina, Kosovo, Macedonia, and Montenegro, and it did not produce complete revenue statistics for Albania and Turkey. (Not all countries can report data in the manner preferred by the IMF.)

The other sources consulted do not cover all countries in the same detail. Ambiguities in terminology (such as the meaning of "land," as previously mentioned) may result in errors in interpretation and in contradictions among the various sources. As administered, systems may not match systems as laid out in legislation. Nevertheless, the survey attempts to resolve such issues when possible. Of course, situations change, so that the accuracy of descriptions cannot be guaranteed.

# CHAPTER 2 THE ORGANIZATION OF REPORT

This report has nine main sections. The next two sections, "Overview" and "Statistics" present general information on European property tax regimes. The five following sections ("Fiscal Arrangements" through "Process Options and Issues") present information on the details of property tax regimes. The purpose of these sections is to discuss issues and evaluate options.

Property tax regimes, of course, reflect other policy and practice concerns than those discussed in later sections. In the interests of fairness and certainty, for example, it is necessary to specify a date of assessment and to specify when ownership or occupancy changes or physical changes are reflected. (Usually, the law specifies a date of assessment, and a year's taxes are based on the situation on that date. Sometimes taxes are prorated according to the fractions of the year before and after the change. Sometimes supplemental assessments can be made on a monthly or quarterly basis.) Property tax systems also address other administrative issues. For example, they provide procedures for dealing with failures or omissions by taxpayers (such as incomplete or erroneous returns) and clerical and similar mistakes by the property tax administration. The aim of measures in these areas would be to adjust taxes already paid ("back taxes" when the payment was too low and refunds when it was too high). Usually a time limit would be set (such as three or four years) in making corrections.

PROPERTY TAX REGIMES

# CHAPTER 3 OVERVIEW OF PROPERTY TAX REGIMES IN EUROPE

## **Brief History**

Although evidence points to well organized property taxation in ancient Greece and Rome, the roots of modern European property tax systems can be found in the ad hoc taxes of the Middle Ages (Almy 2003). A landmark event was the comprehensive fiscal survey of England ordered by William the Conqueror in 1085. The results, compiled in 1086, in what is known as the Domesday Book, constitute Britain's oldest public record. The multi-volume work contains data on the area and use of tracts of land, their occupants, their movables, values, incomes, and taxes paid.

During the Enlightenment, property tax systems of the ancient world essentially were reinvented. Adam Smith's landmark 1776 treatise, *Wealth of Nations*, was especially influential. In many ways, it is the foundation of modern economics and valuation science. The role of wealth (property) in a nation's economy was of interest to early economic thinkers. At the same time, the unpopularity of taxes engendered interest in better tax systems. Smith (1776) propounded four canons of taxation dealing with equality, certainty, convenience of payment, and economy in collection:

- i. "The subject of every state ought to contribute towards the support of the government, as nearly as possible, in proportion to their relative abilities; that is, in proportion to the revenue that they respectively enjoy under the protection of the state.
- ii. "The tax which each individual is bound to pay ought to be certain and not arbitrary.

The time of payment, the manner of payment, the quantity to be paid, ought all to be clear and plain to the contributor, and to every other person.

- iii. "Every tax ought to be levied at the time, or in the manner, in which it is most likely to be convenient for the contributor to pay it.
- iv. "Every tax ought to be so contrived as both to take out and keep out of the pockets of the people as little as possible, over and above what it brings into the public treasury of the state."

The Enlightenment also saw technological advancements in property tax administration. The development of the Austrian cadastre in the 18<sup>th</sup> century became the model for cadastral systems until the advent of computers and aerial photogrammetric mapping. Many countries' cadastral records are organized according to cadastral areas (or "communities") derived from the original cadastral surveys made during the Austro-Hungarian Empire.

The Second World War and its aftermath saw the establishment of the IMF and the World Bank in 1944 and the United Nations (UN) in 1945. Each of these development organizations has been instrumental in efforts to strengthen democracy and stronger local government through improved property tax regimes. They were joined later by organizations such as the OECD. Of course, the birth of the European Union in the 1950s and the collapse of the Soviet Union in 1991 were watershed events in efforts to reform governmental structures and tax regimes. The post war period has seen technological advancements. The advent of digital computers has made advancements in cadastral and valuation systems. Rising expectations about the integrity of valuations has led to the development of professional valuation standards.<sup>1</sup> Mass valuation for property taxation is not a major concern, however.

Historically, land tenure patterns and concentration of political power have influenced choices about the persons liable for paying property taxes. For example, the former English rating system shielded the aristocracy from paying property taxes on property occupied by tenants. (Britain traces its property tax system to the Poor Relief Act of 1601.) Widely spread ownership of land is a comparatively recent development.

As will become clearer, countries that have significantly reformed their property tax regimes in recent decades include Denmark, Estonia, Hungary, Iceland, Latvia, Lithuania, Macedonia, Montenegro, Netherlands, Russia, and Sweden. Several of these efforts were associated with various fiscal decentralization initiatives. The United Kingdom is interesting for a number of changes in its main property taxes since the traditional Rates were abandoned in 1990. They were briefly replaced by a poll tax, the so-called Community Charge. It proved so unpopular that it was replaced by the Council Tax and Uniform Business Rate in 1993. Although there have been regular five-year revaluations under the Uniform Business Rate, efforts to update the values for the Council Tax have stalled. There also differences among the systems in England and Wales, Scotland, Northern Ireland (which has completed a reform of its property tax system), and the smaller islands (e.g., the Isle of Man and Jersey). The three Baltic countries provide examples of rapid progress

toward modern market value-based property tax systems. Greece and Ireland recently have struggled with property tax reform. At the same time, some countries arguably have neglected their property tax systems, and they provide few positive lessons. Nevertheless, reform of their regimes of recurrent taxes on immovable property remains on the agenda in several countries.

# **Current Situation**

#### Recurrent taxes on immovable property

All surveyed European countries have at least one tax on property, and most have several. Of the forty-six countries surveyed, at least forty-four have at least one recurrent tax on immovable property (Malta and San Marino do not). Table 1 attempts to provide a snapshot of the current situation. It summarizes which countries use which types of taxes and which tiers of government receive revenues from taxes on property.

Based on data from IMF 2010, columns 2 through 7 in Table 1 characterize reliance on a particular kind of tax as "no," "low," "mid," or "high." For reliance to be characterized as "low" (cells highlighted in green), the revenues from that tax as a percentage of all tax revenues in the country did not exceed the 25th percentile of the countries reported as levying such a tax in IMF 2010 (the percentages associated with the percentiles can be found at the bottom of the table). Similarly, those characterized as "high" (cells highlighted in pink) fell above the 75th percentile. Those characterized as "mid" (cells highlighted in yellow) fell between "low" and "high." IMF data were not available or were in question for several countries (those with "n.a." for "not available" or those with cells highlighted in gray). As indicated in the notes to the table, some adjustments to the data were made.

Notably, the International Valuation Standards promulgated by the International Valuation Standards Council, (http://www. ivsc.org/) and the European Valuation Standards, promulgated by The European Group of Valuers' Associations (http://www. tegova.org/en/).

As illustrated in Table 2 (following Table 1), some countries have more than one recurrent tax on immovable property. The table identifies taxes assessed against land alone that is, buildings are not subject to the tax (column 2), taxes assessed against buildings (and other structures) alone (column 3), and taxes assessed against *both* land and buildings (column 4). Under the latter type of tax, land and buildings can be assessed separately or land and associated buildings can be assessed as a single economic unit. However, a single law as opposed to separate laws, lays out how land and buildings are to be taxed. Column 5 indicates whether movable property is taxed. The most commonly taxed categories of movables are business machinery and equipment and certain vehicles, aircraft and watercraft.

Table 2 also indicates the *basis* for the tax. Capital value-based taxes are indicated by "CV;" annual rental value-based taxes, by "AV;" and area-based taxes, by "Area." As discussed in the section, "Basis of Assessment," the values in value-based taxes can have different conceptual bases and origins. Thus, the values can closely track current market prices, or they can be completely divorced from current market prices.

Country	Property taxes utilized & relative reliance on each type of tax						Revenue recipients (Percent of total property taxes)		
	Recurrent, Immovable	Recurrent, net wealth	Estates, inheritances, gifts	Financial & capital transfers	Other non- recurrent	Other re-current property	Central	State (regional)	Local
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Albania	Low	No	No	No	No	No	0.0	0.0	100.0
Armenia	Mid	No	No	No	No	No	0.0	0.0	100.0
Austria	Low	No	Mid	Mid	No	No	14.4	4.4	81.2
Belarus	Mid	High	No	No	No	No	0.0	0.0	100.0
Belgium	High	Mid	High	High	Mid	No	11.3	51.6	37.1
Bosnia-Herzegovina	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	10.1	0.0	89.9
Bulgaria	Mid	No	High	No	No	High	0.0	0.0	100.0
Croatia	Low	No	Low	Mid	No	No	51.7	0.0	48.3
Cyprus	Mid	Mid	Mid	Low	No	No	91.7	0.0	8.3
Czech Republic	Low	No	Low	Mid	No	No	67.1	0.0	32.9
Denmark	Mid	Mid	Mid	Low	Low	No	50.7	0.0	49.3
Estonia	Mid	No	No	No	No	No	0.0	0.0	100.0
Finland	Mid	No	High	Mid	No	No	55.4	0.0	44.6
France	High	High	High	Mid	No	Mid	19.3	0.0	80.7
Georgia	Mid	No	No	No	No	No	0.0	0.0	100.0
Germany	Mid	No	Mid	No	High	Low	0.0	52.3	47.7
Greece	Low	Mid	Mid	High	Mid	High	87.8	0.0	12.2
Hungary	Mid	No	Mid	Mid	No	No	37.6	0.0	62.4
Iceland	High	Low	No	Mid	Mid	Low	19.6	.0	80.4

Table 1: Propert	y Taxes Imposed	and Distribution of	f Property Tax Revenues
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Country	Property tax	taxes utili	zed & relat	tive reliand	e on each	type of		recipients roperty ta	
	Recurrent, Immovable	Recurrent, net wealth	Estates, inheritances, gifts	Financial & capital transfers	Other non- recurrent	Other re-current property	Central	State (regional)	Local
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Ireland	High	No	Mid	No	No	No	19.4	.0	80.6
Italy	Mid	Mid	Mid	No	No	Mid	4.5	0.0	95.5
Kazakhstan	High	No	No	No	No	Mid	0.0	0.0	100.0
Kosovo	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Latvia	Mid	No	No	No	No	No	0.0	0.0	100.0
Lithuania	Mid	No	Low	No	No	No	0.0	0.0	100.0
Luxembourg	Mid	Low	Low	Mid	No	No	92.2	0.0	7.8
Macedonia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Malta	No	No	Mid	High	No	No	100.0	.0	.0
Moldova	Low	No	No	No	Low	High	3.4	.0	96.6
Montenegro	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a	n.a.
Netherlands	Mid	Low	High	High	No	Mid	69.3	.0	30.7
Norway	Low	Mid	Mid	Low	No	No	53.5	.0	46.5
Poland	High	No	Mid	No	No	Low	0.0	0.0	100.0
Portugal	Mid	No	Low	Mid	No	No	0.4	0.0	99.6
Romania	High	No	No	Low	No	No	2.8	0.0	97.2
Russia	High	No	Low	No	No	Mid	0.0	79.1	21.0
San Marino	No	No	High	High	Mid	No	100.0	0.0	0.0
Serbia	Mid	No	Low	Mid	No	Low	0.4	0.0	99.6
Slovakia	Mid	No	Low	Low	No	No	0.6	0.0	99.4
Slovenia	Mid	Low	Mid	Low	No	No	0.0	0.0	100.0
Spain	High	Mid	High	High	Mid	No	0.7	58.9	40.4
Sweden	Mid	No	Low	Mid	No	No	60.8	0.0	39.2
Switzerland	Low	High	Mid	Mid	No	No	19.1	50.0	31.0
Turkey	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a	n.a.	n.a.
Ukraine	Low	No	No	No	No	No	0.0	0.0	100.0
United Kingdom	High	No	Mid	Mid	High	No	68.7	0.0	31.3
Number of. countries	39	13	29	25	9	11			
Reliance benchmarks	li	ndicated typ	e of tax as a	percentage	of total taxe	es			
Low	≤ 0.0113	≤0.0010	≤0.0008	≤0.0073	≤0.0008	≤0.0001			
Mid	0.0114- 0.032	0.0011- 0.0241	0.0009- 0.0105	0.0074- 0.0151	0.0009- 0.0021	0.0002- 0.0073			
High	>0.032	>0.0241	>0.0105	>0.0151	>0.0021	>0.0073			

#### Notes:

1. Relative reliance characterizations (see text) and revenue percentage are by the author based on revenue data in IMF 2010.

2. The data on net wealth taxes for the Czech Republic and Finland were reassigned to recurrent taxes on immovable property,

because the Czech Republic does not have a new wealth tax and Finland's was abolished in 2006.

3. In Albania, local governments receive 100 percent of recurrent taxes on immovable property.

Country	Land Tax	Building Tax	Real Property (Land & Buildings) Tax	Movables Taxed
(1)	(2)	(3)	(4)	(5)
Albania			Tax on Immovable Property (buildings and agricultural land) (1998): Area	
Armenia	Land Tax (1994): Capital value (CV)	Property Tax (1995, revised 1998): CV		Property Tax: Industrial plant and equipment, & some vehicles
Austria			Real Property Tax (Grundsteurer): CV	
Belarus	Land Tax (1991): Area	Real Estate Tax (1991): CV		
Belgium			Onroerende Voorheffing/ Précompte Immobilier: Annual rental value (AV)	
Bosnia-Herzegovina			Local Property Tax (Area)	
Bulgaria			Immovable Property Tax (1997; amended 1998): CV	Certain vehicles, aircraft, & vessels
Croatia	Tax on Uncultivated Agricultural Land (2001): Area Unused Construction Land Tax (2001): Area	Tax on Holiday Houses: Area	Unused Enterprise Real Estate Tax (2001): Area	?
Cyprus			Immovable Property Tax: CV	
Czech Republic			Real Estate Property Tax (1993): Area	
Denmark	Land Tax (Grundskyld, 1926): CV	Service Tax (Daekningafgift, 1961): CV	Property Value Tax (Ejendomsvaerdiskat,2000): CV	
Estonia	Land Tax (1993): CV			
Finland			Tax on Real Property (Kiinteistövero; fastighetsskatt, 1994): CV	
France	Land Tax (Taxe Foncière (sur les proprietés non bâties)): AV	Housing Tax (Taxe d'Habitation): AV	Land & Building Tax (Taxe Foncière (sur les proprietés bâties)): AV Local Economic Contribution (Contribution Économique Territorale, 2010): AV	
Georgia	Agricultural Land Tax (1995): Area Tax on Non- Agricultural Land (1997): Area	Tax on Property of Natural Persons (1993): CV Tax on Property of Enterprises (1993): CV		Certain vehicles, aircraft, and watercraft
Germany			Real Property Tax (Grundsteurer, 1973): CV	Some livestock & agricultural machinery
Greece		Special Duty on Buildings Powered by Electricity (2011): Area	State (Large) Real Estate Tax (2010): CV Local Real Estate Duty (1997): CV	?

#### Table 2: Base and Basis of Taxes on Immovable Property

Country	Land Tax	Building Tax	Real Property (Land & Buildings) Tax	Movables Taxed	
(1)	(2)	(3)	(4)	(5)	
Hungary	Tax on Plots (1991)	Tax on Buildings (1991) Tourist Traffic Tax (on holiday houses)			
Iceland			Property Tax (CV)		
Ireland			Rates: AV Non Principal Private Residence Charge (2009): Flat €200 charge Household Charge (2012): Flat €100 charge		
Italy		Local Government Business Tax (Imposta comunale sull'industria, arti e professioni, 1989)	Communal Tax on Immovable Property (Imposta Comunale sugli immobili, 1993): AV		
Kazakhstan	Land Tax (2008): Area	Property Tax (2008): CV			
Kosovo			Property Tax (2010): CV		
Latvia			Real Property Tax (1998): CV		
Lithuania	Land Tax (1990, revised in 1992):CV	Real Property Tax (2006): CV			
Luxembourg			Property Tax (Impôt foncier, 1936): CV		
Macedonia			Property Tax: CV	Certain vehicles, aircraft, & vessels	
Moldova	Land Tax: Area	Immovable Property Tax (1994): CV		Plant and equipment	
Montenegro			Real Estate Tax (2003): CV		
Netherlands			Immovable Property Tax (Onroerende-Zaakbelasting or OZB, 1970): CV	Houseboats and the like can be taxed.	
Norway			Real Estate Tax (1975): CV		
Poland	Agricultural & Forest Land Taxes: Area		Urban Property Tax (1991): Area		
Portugal			Municipal Tax (IMI, 1989): CV		
Romania	Tax on Land (1981): Area Fee for the use of State-owned land (1975)	Tax on Buildings (1981): CV			
Russia	Land Tax (1991): CV	Tax on Property of Physical Persons (1991): CV Tax on Property of Enterprises (1991): CV		Industrial plant and equipment & some vehicles	
Serbia	Land Usage Fee: Area		Property Tax (2001): CV		
Slovakia			Real Estate Tax (1993): Area (agricultural land: CV)		
Slovenia	Charge for Use of Building Ground (1995): CV	Property Tax (1988): CV		Certain ships	

Country	Land Tax	Building Tax	Real Property (Land & Buildings) Tax	Movables Taxed
(1)	(2)	(3)	(4)	(5)
Spain			Real Estate Tax (Impuesto sobre Bienes Inmuebles): CV	
Sweden			Real Estate Tax (Statlig Fastighetsskatt, 1985): CV	
Switzerland			Land Tax Business Tax (Geneva)	
Turkey			Immovable Property Tax: CV	
Ukraine	Land Tax (1992): Area or CV	Real Estate Tax (2012): Area		
United Kingdom			Uniform Business Rate (England & Wales) Council Tax (England & Wales)	

Notes:

1. 'CV' means capital value; 'AV' means annual rental value (often the values are "cadastral" values, specifically used as the basis for the tax). 'Area' means the base is land area or some measurement of building area.

2. A "--" signifies "no" (in a few instances, it means "no information")

#### Taxes on net wealth and property transfers

Although this report focuses on recurrent taxes on immovable property, a few words about recurrent taxes on net wealth and taxes on real estate transfers (a tax on the transfer of wealth) are appropriate. Rudnick and Gordon (1996) addressed both kinds, the latter being viewed as taxes on the transfer of wealth. Despite their conceptual appeal, recurrent taxes on net wealth seem to be in decline, although the pictures presented by revenue statistics and by system descriptions can conflict. However, European countries that make substantial use of recurrent taxes on net wealth include France, Luxembourg (on corporations), Norway, and Switzerland. Iceland has temporarily reintroduced a net wealth tax on residents (EU 2010). Countries that recently abandoned such taxes include Denmark, Finland, Iceland (on corporations), Luxembourg (on residents), Netherlands, Spain, and Sweden.

Taxes on transfers of real property (which are in the IMF category of taxes on financial and capital transactions) are more widely used. At least thirty-three countries appear to; two appear not to (Armenia and Belarus).

registration procedures Property that require price disclosures and value-based transfer taxes-if the rates are moderate-can help in the administration of a value-based recurrent tax on immovable property. High rates can have detrimental effects. Although high real property transfer taxes have a certain political appeal (Bahl 2009, p. 21), they create incentives to conceal transfers, actual transfer prices, or both. Such concealments undercut efficient administration of value-based taxes on immovable property, and they can make property markets less efficient and transparent. What constitutes a "high" rate of transfer taxation is subject to debate. In general, however, rates below 2 percent are considered acceptable, and rates of 5 percent or higher are considered detrimental. Countries that appear to exceed this benchmark on some transfers include Belgium, Bosnia-Herzegovina, Ireland, Croatia, Luxembourg, Malta, Netherlands, and Spain. Belgium is the only country with a transfer tax rate in excess of 10 percent; its rate is 12.5 percent. (It should be noted that the characterizations of taxes on financial and capital transactions in Table 1 cannot be ascribed purely to immovable property transfers.)

PROPERTY TAX REGIMES

# CHAPTER 4 STATISTICS OF UTILIZATION OF TAXES ON PROPERTY

To get around the difficulties of currency conversion, two indicators commonly are used in international comparisons of the importance of taxes: (1) taxes as a percentage of gross domestic product (GDP) and (2) taxes as a percentage of governmental revenue. The latter can be examined by level of government and type of tax. Since the importance of taxes generally in a nation's economy and tax system has well studied, this report will focus on the importance property taxes and, more specifically, the importance of recurrent taxes on immovable property to local government. As noted, the analysis is based on GFS 2010, which generally reports data for 2008 (although the data for a few countries are earlier).

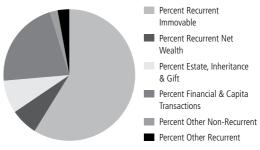
The patterns that emerge from examining all taxes on property as a percentage of GDP, total general government revenues, and all general government taxes depend on the interplays among the three factors. Taxes on property taxes as a percentage of GDP for the forty countries for which data were available ranged from less than one-tenth of 1 percent (Norway, with a large GDP and low use of property taxes) to 10.7 percent (Slovakia). See Table 3. Half of the countries were between 0.6 percent and 1.5 percent; the median percentage was 0.4 percent (Cyprus and Sweden). Moving to property taxes as a percentage of total revenues, half were between 1.2 percent and 3.3 percent, and the median, minimum, and maximum are shown in Table 3. The corresponding range (from the 25<sup>th</sup> percentile to the 75<sup>th</sup> percentile) for property taxes as a percentage of total taxes was 2.1 percent and 5.6 percent, and Table 3 shows the median, minimum, and maximum. Interestingly, in terms of taxes on property as a percentage of total taxes (as opposed to GDP), Norway now has the median percentage. As can be seen, property taxes do not emerge as generally important sources of revenue

Reference Category	Number of Countries	Median		Minimum		Maximum	
		Country	Percent	Country	Percent	Country	Percent
GDP	40	Cyprus Sweden	1.04	Norway	0.00	Slovakia	10.74
Total Revenues	41	Russia	2.19	Albania	0.54	United Kingdom	12.88
Total Taxes	41	Norway	3.57	Albania	0.74	United Kingdom	18.10

Source: GFS 2010; calculations by author.

However, as Figure 1 shows, recurrent taxes on immovable property are most important, accounting for 58.9 percent of total taxes on property. As can be seen, the second most important category is taxes on financial and capital transactions (21.6 percent). Taxes on estates, inheritances, and gifts come third at 8.1 percent. Recurrent taxes on net wealth account for only 6.6 percent. The remaining categories account for 4.8 percent. The pattern in individual countries can, of course, can be considerably different, as Figure 2 reveals.

# Figure 1: Relative Importance of the Types of Taxes on Property



Source: GFS 2010; computations by author.

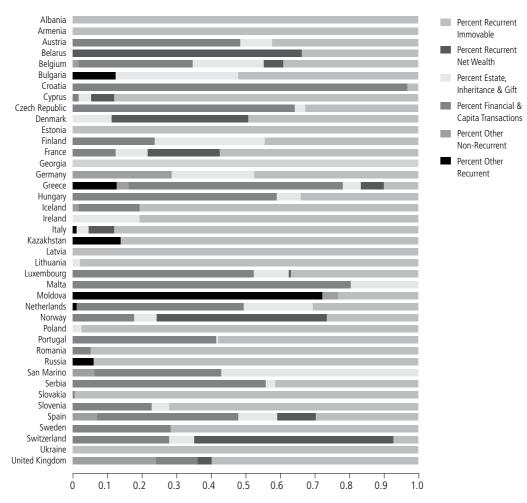


Figure 2: Utilization of Types of Taxes on Property as a Percent of Total Taxes on Property

Source: GFS 2010; computations by author.

Turning to recurrent taxes on immovable property, Table 4 reveals that rankings can shift as one moves from GDP, to total local revenues, to total local taxes. Recurrent taxes on immovable property as a percentage of GDP for the thirty-nine countries for which data were available ranged from less than onetenth of 1 percent (Norway—as before) to 10.7 percent (Slovakia). Half of the countries were between 0.2 percent and 0.8 percent; the median percentage was 0.4 percent (Latvia). Moving to recurrent taxes on immovable property as percentage total local revenue, half were between 2.5 percent and 9.8 percent, and the median, minimum, and maximum are shown in Table 4. The corresponding range (from the 25<sup>th</sup> percentile to the 75<sup>th</sup> percentile) for recurrent taxes on immovable property as a percentage of total local taxes was 4.7 percent and 29.9 percent. Figure 3 depicts the pattern among the countries for which data were available.

# Table 4: Recurrent Taxes on Immovable Property as a Percent of GDP, Total Local Revenues, and Total Local Taxes

	Number of	Median		Minimum		Maximum	
	Countries	Country	Percent	Country	Percent	Country	Percent
GDP	39	Latvia	0.44	Norway	0.00	Slovakia	10.67
Total Revenues	39	Italy	3.85	Croatia	0.22	France	21.52
Total Taxes	38	Slovakia Hungary	11.23	Croatia	0.36	Ireland United Kingdom	100.00

Source: GFS 2010, computations by author.

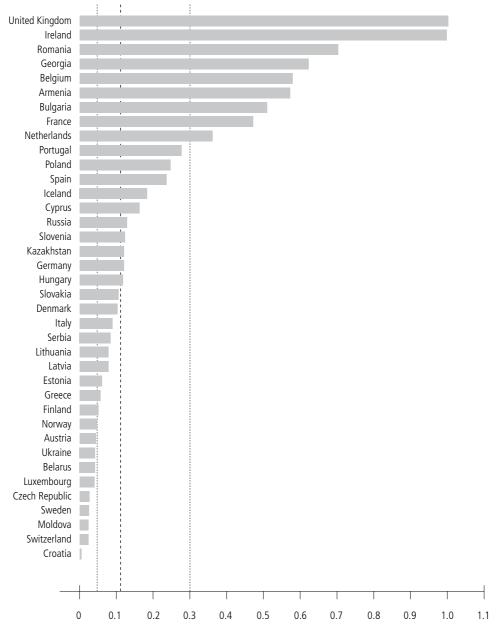


Figure 3: Recurrent Taxes on Immovable Property as a Percent of Total Local Taxes

Source: GFS 2010, computations by author.

The discussion above focuses on the situation in about 2008. Others have researched trends. For example, Bahl (2009, p. 4, table 1) shows that property taxes (probably all categories) as a percentage of GDP have been gradually trending upward since the 1970s. Levels of property taxation in OECD countries generally are higher.

# CHAPTER 5 FISCAL ARRANGEMENTS

This section discusses the power to impose a recurrent tax on property and how that power is exercised. Its primary focus is on the interests of taxing bodies and of property tax recipients, rather than taxpayers. Features mainly affecting individual tax assessments are the subjects of the sections on "Main Design Features" and "Strategies for Proving Selective Property Tax Relief."

# Power of Taxation, Revenue Assignments, and Local Discretion

The basic system of government can influence the structure and role of local governments and, by extension, their reliance on property taxes. In a federal system of government, where powers, including taxation powers, are constitutionally assigned, local governments tend to have more autonomy and discretion than under a unitary government. Under a unitary government, the most common form of government, any sub-national governments usually derive their powers from the central government, not the constitution. However, the basic system of government is not an infallible indicator of the nature of a property tax system, reliance on property taxes, or local autonomy. Austria, Belgium, and Germany, countries with federal systems of government, have essentially a single national property tax system, although sub-national government have some discretion over reliance on immovable property taxes via their powers to set coefficients and rates. Russia, nominally a federation, also has a centralized system. In contrast, Hungary, and Netherlands, and Norway, countries with unitary systems of government, have devolved considerable,

responsibility for property tax policy and administration to municipal governments. Bosnia & Herzegovina and Switzerland, other federal countries, have expected regional differences in the details of property tax systems.

Absent a constitutional prohibition to the contrary, a higher-tier government can assign tax revenues and devolve some taxation authority to sub-national governments. For example, the government with the formal power of taxation may give lower-tier governments some power to set property tax rates, decide which properties are to be taxed, grant exemptions, provide property tax relief, and the like.

Table 5 summarizes which levels of government receive revenues from recurrent taxes on immovable property. It also indicates the discretion local governments have regarding those taxes. In Croatia, Hungary, and Norway, local governments can decide whether to impose recurrent property taxes on immovable property, and not all local governments impose such taxes. The same is true of federal Switzerland: Cantons and municipalities can choose one of several property tax systems. In some cantons, only the canton levies a property tax. In others, only communes levy property taxes. In the others, both the canton and the communes levy property taxes. If Hungarian local governments elect to impose a property tax (they continue to rely on unrestricted central government grants), they can decide from among a property tax on buildings, land plots, or on tourism, which can be levied on summer houses and the like. They can choose between area and value as a

basis. In Denmark, municipalities may elect to impose the Service Tax on non-residential buildings. The Russian Federation has enacted legislation that allows certain local authorities to institute market value-based property taxes. The law in Netherlands allows municipalities to enact their own property tax by-laws. Municipalities may impose either, both, or neither of the owner's tax and the user's tax (most impose both). Subject to oversight by the central government, municipalities have full responsibility for property tax administration. Modern valuation methods are used, and many municipalities rely on contractors for valuation services. Municipal tax by-laws need royal assent before taxes can be levied. Otherwise, discretion over the tax base itself is limited in Europe.

However, some discretion over the rate of tax is more widespread, although local governments have little or no discretion over property tax rates in Albania, Armenia, and Portugal (rural property). In valuebased property taxes, the central government usually sets upper limits and sometimes sets lower limits on tax rates. In Germany and Switzerland, regional governments (länder, and cantons, respectively) have authority to limit rates chosen by local authorities. The objective of an upper rate limit is to prevent a level of taxation that is deemed excessive. The objective of a lower limit often is to encourage a certain minimum level of property taxation and reduce the magnitude of central government grants. In area-based systems, local governments sometimes can apply coefficients to the tax rates set in the legislation to reflect differences in location, quality of buildings, and other factors presumed to influence property value and, hence, the capacity to pay taxes. In addition, local governments in some countries have some discretion over exemptions and other forms of tax relief, usually with the proviso that such relief will not increase central government grants.

Country	Revenue assignments*	Local discretion				
		Tax / tax base	Rates	Exemptions		
Albania	LG all	No	Yes	No		
Armenia	CG-LG	No	No	Yes		
Austria	LG all	No	Yes	No		
Belarus	LG all	No	Yes	Yes		
Belgium	CG-RG-LG	No	Yes (regarding municipal rate surcharges)	No		
Bosnia-Herzegovina	RG-LG (Federation) LG all (Republic Srpska)	No	Yes	No		
Bulgaria	LG all	No	Yes	No		
Croatia	LG all	Yes (regarding the 2001 taxes)	Yes	Yes		
Cyprus	CG-LG	No	No	No		
Czech Republic	LG all	No	Yes (municipal coefficients)	No		
Denmark	LG all	Yes—re imposition of Service Tax	Yes—re Land Tax & Service Tax	Yes		
Estonia	LG all	No	Yes	Yes		

Table 5: Local Government Discretion Regarding Immovable Property Taxes

Country	Revenue assignments*	Local discretion				
Country		Tax / tax base	Rates	Exemptions		
Finland	LG all	No	Yes	No		
France	RG-LG	No	Yes	Yes		
Georgia	LG all	No	Yes	Yes (re agricultural land tax)		
Germany	LG all	No	Yes (re "leverage" factors)	No		
Greece	CG-LG	No	No	No		
Hungary	LG all	Yes (re imposition of a property tax & re which tax)	Yes	Yes		
Iceland	CG-LG	No	Yes	No		
Ireland	LG all	No	Yes (Commercial Rates)	No		
Italy	LG all	No	Yes	No		
Kazakhstan	LG all	No	Yes (Land Tax)	No		
Kosovo	LG all	No	Yes	No		
Latvia	LG all	No	No	Yes (certain abatements		
Lithuania	LG all	No	Yes (only Immovable Property Tax)	Yes		
Luxembourg	LG all	No	Yes (multipliers)	No		
Macedonia	LG all	No	Yes	No		
Moldova	LG all	No	Yes	No		
Montenegro	LG all	No	Yes	No		
Netherlands	LG all	Yes	Yes	Yes		
Norway	CG-LG	Yes	Yes			
Poland	LG all	No	Yes	Yes		
Portugal	LG all	No	Yes, except for the rural property tax	No		
Romania	LG all	Yes (building values can be adjusted up to 50%)	Yes	No		
Russia	RG-LG	Yes	Yes	No		
Serbia	LG all	No	Yes	No		
Slovakia	LG all	No	Yes	No		
Slovenia	LG all	No	Yes	No		
Spain	(CG-RG?)-LG	No	Yes	No		
Sweden	CG-LG	No	No	No		
Switzerland	RG-LG	Yes	Yes	No		
Turkey	LG	No	No	No		
Ukraine	LG all	No	No	No		
United Kingdom	CG (Rates)-LG (Council Tax)	No	Yes (Council Tax)	No		

\*CG means central government, RG means a regional government, and LG means local government.

PROPERTY TAX REGIMES

# CHAPTER 6 RATE SETTING APPROACHES AND RATE STRUCTURES

There are several approaches to setting property tax rates. Rates can be: (1) fixed in legislation; (2) periodically adjusted for inflation, if fixed: (3) determined based on budgetary needs; or (4) some combination of the above. Rate structures can be uniform or progressive (rate differentials are discussed below).

Fixed rates or fixed ranges in rates are simplest to introduce. However, such rate structures give local governments only a limited ability to set rates that match local needs. It is difficult to match burdens with the capacity to pay taxes. Moreover, yields cannot be easily predetermined, and, once maximum rates are reached, yields are totally dependent on the size of the property tax base. Inflation and infrequent reassessments may diminish revenues in real terms. However, tax rates or values can be indexed to reduce such losses. Countries with indexing include Georgia, Moldova, Poland (the agricultural land tax is based on price of five quintals-500 kg.of rye), Russia, Slovakia, United Kingdom (Uniform Business Rate).

When rates are based on budgetary needs (the third approach), the first step is to determine the amount of revenue desired from the property tax, which is called the property tax levy. This levy usually is the difference between planned expenditures and the revenues anticipated from other sources (fees, other taxes, grants from other tiers of government, and so forth). Mathematically, the property tax rate results from application of the following formula:

$$R = \frac{E - NPR}{AV}$$

where R is the rate of tax, E is the total approved budget, NPR is total estimated nonproperty-tax revenue, and AV is the tax base (in a value-based tax, total assessed value). The rate, R, can still be subject to limits. This approach is taken in France and Netherlands, where there are no limits, except that annual increases in either the owner's tax rate or the user's tax rate cannot exceed 20 percent. Subject to any canton limits, municipalities in Switzerland also may set rates based on budgetary needs.

In addition, property tax rates can be single or compound (that is, built up from the rates of overlapping regional and local governments). A compound tax rate structure can blur accountability for overall property tax burdens. Examples of compound rates can be found in Austria, Belgium, Denmark, France, and Germany. In Austria, the rate applied to a particular property is the federal rate multiplied by municipal coefficient (the maximum multiple is 5 or 500%). In Belgium, the rate is the sum of the regional rate and the municipal rate. In Denmark, the land tax rate is the sum of the fixed county rate and the variable municipality rate. In France, the rate depends on rates set by regions, departments (counties), metropolitan districts, and compounds. Each entity sets a rate subject to limits. For example, a commune property tax rate must be no greater than 2.5 times the average rate in the department or the national rate, if higher. Similar to Austria, the rate in Germany is a combination of the federal basic rate (Steuermesszahl) and the locally determined municipal coefficients (Hebesatz). In 2000, municipal coefficients averaged 278 for agricultural and forestry taxes and 367 for other immovable property.

Some countries also adopt progressive rate structures. These are identified under "Differentials" in Table 6 (on page 31). For additional advice on rate-setting approaches, see Bahl 2009, p.14, Table 3.

## **Other Fiscal Issues**

Particularly with highly decentralized local government, a local government's own-source fiscal resources (tax capacity) may not match its citizens' demands for governmental services or may not be sufficient to fund mandated localities functions. Some have more resources than they need; others have less. As a result, national and higher-level regional governments like provinces often make grants to needy local governments to enable them to provide necessary services. Often, the property tax capacity and effort of a local government influences the size of the grant it is eligible to receive. This is the case in Denmark. In France, portions of certain grants to local governments are distributed in proportion to tax bases and a portion on the basis of effort. In Switzerland, a canton may make grants when a community taxes at the maximum allowable rate but cannot meet its revenue needs.

Another approach might be termed "tax base sharing." An example of this approach is the way the Uniform Business Rate (Rates) is collected and distributed in the United Kingdom. Although Rates are collected locally, all revenues are transmitted to the central government, which then distributes them to local governments on the basis of the population of local governments.

A factor that affects the total value of taxable property in a local government is the amount of tax-exempt property. Some localities, such as national capitals, have high concentrations of exempt property. This diminishes their tax capacity, but it may not diminish the demand for local government services. National and some regional government agencies compensate for such losses in taxable property by providing special grants or payments in lieu of property taxes (the acronym "PILOT" is sometimes used to describe these compensation schemes).

In France, the large number of local governments results in substantial fiscal disparities. Under the Land and Building Tax, grants are made for some government property when losses from exemptions exceed 10 percent of tax yield, calculated on the basis of tax liability in the absence of exemptions.

Denmark partially avoids the need for payments in lieu of taxes by making central government properties fully liable for the land tax for municipalities and partially liable for the land tax to counties. In Estonia, the central government pays about one-third of all land tax revenues on state-owned forestland.

# CHAPTER 7 MAIN DESIGN FEATURES

This section discusses the features of a property tax that fundamentally define who is obligated to pay the tax, the types of properties that must be assessed (property that is not assessed is effectively exempt from the tax), the unit of assessment, and the basis for apportioning property tax burdens. The next section, "Strategies for Providing Selective Property Tax Relief," discusses measures that relieve certain properties or property taxpayers from all or a portion of the taxes that would be due in the absence of the measure. As will be seen, there is tremendous diversity in the details of property tax systems, even when they share elements in common with other systems.

# Responsibility for Paying the Property Tax

Property tax laws need to establish the person or body responsible for paying property taxes (the *subject* of the tax). The options are: (1) the owner of the property, (2) the occupant or user of the property, (3) the property itself regardless of who owns it or uses it, and (4) some combination of the above.

The choice should harmonize with the unit and basis of assessment (as discussed below). One of the factors that affect the choice between making owners or occupants liable for property taxes is the status of property ownership rights. Where private ownership rights have not been established, users are designated as taxpayers. Several European countries distinguish between physical persons (living human beings, also known as natural persons) and legal persons (enterprises, also known as juridical persons). Although the distinction originally had to do with socialistera property rights, nowadays the distinction also can serve policy objectives, such as preferential taxation of residential property or with practical considerations (enterprises may have better records of their assets). Countries that distinguish between physical and legal persons include Armenia, Belarus, Hungary, Lithuania, Poland, Romania, and the Russian Federation. The property tax systems of the Czech Republic and Estonia contain no differences related to the type of person owning property (although they may classify owners as physical or legal persons for information purposes). Several European countries maintain population and company registers that can help identify ownership types and track changes.

As property occupants generally outnumber property owners, making owners liable for property taxes reduces the number of taxpayers and (other things being equal) the costs of administration. Enforcement of delinquencies arguably is simplified. Although ownership can be concealed, owners generally are less mobile than tenants. However, where owners generally are responsible for paying property taxes, users can be made responsible for paying the property tax when they use property owned by the state or when the owner is unknown. Making occupants responsible for paying property taxes has the advantage of making the costs of local government services visible to more people, thereby improving democratic accountability. Conversely, when occupiers generally are liable and a property is vacant, the owner can be made liable.

An administrative issue is how to deal with properties that have multiple owners or occupants. The main options are: (1) designate only one person as the taxpayer and (2) assess each person in proportion to their interest in the property. The first option simplifies administration and transfers to the property owners or occupants any problems with raising the money needed to pay the taxes. Advocates of the second approach stress its fairness to the part owners or occupants who pay their shares; they have no responsibility for the amounts unpaid by others. Some laws allow persons who pay property taxes on behalf of another to establish a lien. Among the examples of the first approach is the Netherlands, where under the user's property tax, the person with the greatest use receives the tax bill when the property is residential.

## **Taxable Property**

The *objects* (or coverage) of a property tax are the types of property for which the tax must be paid absent an exemption or other form of property tax relief. As previously discussed, property falls into two general categories: (1) *immovable* property and (2) *movable* property, which in its broadest definition is all property that is not immovable. In practice, only certain kinds of movable property are taxed (e.g., business machinery and equipment and vehicles, aircraft, and watercraft). As Table 2 reveals, most of the countries surveyed tax only immovable property.

Because movable property is defined by exception, precise categorization of property as movable or immovable can be difficult in practice, and gray areas inevitably arise. Industrial plant and machinery, such as are found in a chemical plant or oil refinery, are problematic because of their considerable value and the fact that they can be functionally similar to buildings. Similarly, it can be difficult to define "buildings" and "other constructions" well enough to make it easy to classify them. Such distinctions become important when only one type of property is taxable or when there is a steep differential in taxation. One solution is to list types of property that are deemed to be movable (or sometimes immovable) and taxable. Czech Republic has very detailed regulations defining buildings and structures. Ireland and United Kingdom have similar regulations concerning taxable industrial structures (production and motive power equipment are ratable in Ireland).

Other complications can arise, especially in market value-based taxes. When land or buildings is taxed separately, it is difficult to estimate the market value of each component accurately. This difficulty also occurs under unified property taxes when the assessor is required to divide total value into its land and buildings components. This makes it difficult to implement a pure site value tax—a land tax based only on the location value of the property. When a building or a unit in a building is sold, its price will reflect the value of its location (also an element of land value).

Other issues arise. Some types of property, such as public rights-of-way and routes of transportation (waterways, state-owned railroads, and streets and roads), often are excluded from cadastres and the property tax base on grounds of administrative convenience. This is a common practice, because there is no market evidence of the value of longestablished public routes of transportation. Denmark follows this approach.

Some countries tax only land not covered by a building or structure. For example, Hungary allows taxation of only "net unimproved area." The same is true in Czech Republic. Thus the taxable area of a 300 m<sup>2</sup> land plot with a 100 m<sup>2</sup> house on it is 200 m<sup>2</sup>.

In some countries only "registered" property is taxable. Thus, persons who have customarily used land or buildings or have received property rights under a restitution or privatisation program may be reluctant to take the final steps to register their rights, because they will become liable for taxation. Such a policy also creates incentives to construct buildings without authorization and conceal inheritances and other ownership changes.

#### **Basis of Assessment**

The basis of a property tax is the quantity that is measured or estimated to decide each property's relative share of the total property tax burden. The two fundamental bases are value and non-value. See Table 2. (As noted, Hungary and Switzerland have made the choice of the basis for property taxation optional.

#### Non-value

Land area, building area, or both is the usual basis for non-value property tax system, although other bases have been used (some building taxes are based on volumes, and the number of windows has been used). Under area-based property tax systems, taxes are determined simply by multiplying a measurement of area by a rate and any applicable modifying coefficients.

Area-based systems have the advantage of being simpler to administer. Basically, only property classifications and area measurements are needed. They are easier to implement, because market data do not have to be collected and analyzed. There is no need for revaluations. They also are more objective than value-based systems, in that area measurements are less contestable than value determinations. On the other hand, area-based property tax systems are often believed to be less fair. Highly desirable properties pay the same taxes as undesirable properties. Individual assessments bear little relationship to either ability to pay or benefits received, which reduces public acceptance. Although taxpayers might see this as an advantage, area-based property taxes are less buoyant than value-based systems, unless frequent adjustments are made to rates.

The disadvantages of area-based systems can be offset by the introduction of adjustment coefficients. However, doing so reduces simplicity and objectivity (at the margins, classification is a matter of judgment). Most of the area-based systems in Europe involve adjustment coefficients. Arguably, a welldesigned area-based system can meet tests of equity as well as a poorly designed or long neglected value-based system.

Under an area-based system, it is desirable to have rules concerning the measurement of areas, particularly of buildings. External perimeter area generally is easiest to measure. However, it is difficult to apply this measure consistently to parts of buildings, such as apartments or shops, so internal measurements may need to be taken, despite the additional costs of doing so. Poland uses net internal area measurements.

#### Value

Meaningful uniformity in property taxation is achieved when effective property tax rates (property taxes as a percentage of property values) are roughly equal. Uniformity is most easily achieved when current market value is the basis of the property tax.

When a measure of value is the basis for a property tax, there are several options: market value, restricted market value (such as current use value), or some notional (or normative) value. Moreover, *value* can be on a capitalvalue or an annual-value basis. Each basis will have advantages and disadvantages of a theoretical and practical nature.

Under annual value, only the current year's rental values figure in the valuation. Under capital value, the current and future years' rental values figure in the valuation. When annual value is the basis, it can be expressed on a gross or net basis. Under the former, the owner would be assumed to pay all operating expenses; under the latter, the occupier would be assumed to pay (specified) operating expenses (such as repairs and insurance, as is the case with the British uniform business rates). Annual value and capital value are *not* mathematically equivalent ways to apportion property taxes. The bases vary in proportion to the capitalization factors that convert annual rental values to capital values. These factors are influenced by several things, including the perceived certainty that future rents will be paid.

Of course, a country may use more than one basis. For example, agricultural property may be taxed on a current use or soil productivity basis, while urban property is taxed on a market value basis.

Because actual value changes over time and because the methods used in valuation influence the outcome, most countries characterize property tax values as "cadastral values," "tax values," or some such term. This makes clearer the use to which the value applies. Professional valuation standards recognize that the purpose of a valuation can affect how value is measured. Moreover, actual values change over time, so that valuations made at different times will not be identical. Valuation issues will be discussed in more detail later.

In value-based property tax systems, assessments can be a fraction of the determined value. For example, in Sweden, properties are taxed on 75 percent of their estimated market values. Sometimes the fraction varies with the use of the property or another factor. These are called differential or classified property tax systems (see the section on "Strategies for Providing Selective Property Tax Relief").

# CHAPTER 8 STRATEGIES FOR PROVIDING SELECTIVE PROPERTY TAX RELIEF

No country taxes all immovable property uniformly. In addition to the limited coverage of some property taxes and the effects on tax burdens of the valuation options mentioned above, there are myriad other ways to vary property tax burdens among different types of property and taxpayers. This section addresses the most important options.

Sound reasons for granting exemptions and other forms of property tax relief exist, and all property tax systems provide selective relief. Administrative simplicity is the chief rationale for exempting government property (they eliminate the need to "take money from one pocket and put it in another"). Exemption of certain non-governmental organizations can be rationalized on the ground that they provide socially worthwhile services that government otherwise might have to provide. Exemptions of charitable, educational, and religious properties fall into this category. Exemptions and relief for residential properties are intended to cushion residents from excessive property tax burdens. They are politically popular as well.

## Differentials

It is common to classify property on the basis of its use and to vary the amount of tax exacted from property in each class. See Table 6. The ostensible purpose of differentials is to shift burdens toward those better able to pay and away from those who are least able or who need an incentive to perform a useful activity. However, the real purpose can be merely to appease voters. Typically, agricultural and residential property is favored, and business property is not

The main mechanisms for establishing property tax differentials are to employ differing assessment ratios (the ratio of taxable value to market value), differing property tax rates, or both. In area-based systems, different coefficients can be applied to the area measurements instead of, or in addition to, rate differentials. The differentials can be based on the population of a municipality, location within a municipality, and story within a building. Their rationale is to bring property tax obligations into line with presumed ability to pay or with general value patterns. Differentials based on types of crops or soil classifications have the same purpose. As noted, the basis of valuation also can be varied, such as between market value and current use value.

The main types of property—land, buildings, and movables-can be taxed differentially. Of particular interest to policymakers is a differential between land and buildings. Some have long advocated not taxing buildings or taxing them at a lower rate than land. Estonia and Ukraine are examples of countries that tax only land value. Denmark is an example of a country that, in effect, taxes buildings at a lower rate than land. The chief rationale for taxing land at a (much) higher rate than buildings is more efficient land use. The argument has two elements. First, as land essentially is fixed in supply, a uniform tax on land value cannot be avoided. If the effective tax rate on land is high, speculation or hoarding land becomes uneconomic. Second, taxing buildings is a disincentive to development. It also is argued that land value taxation is easier to administer than land and building taxation, because cadastral

record keeping is simpler. Unfortunately, there are few, if any, examples of where the putative superiority of the preferential taxation of buildings has been demonstrated.1 There are several reasons for this. The disincentive effects of taxing buildings are trivial when effective tax rates are low. Taxing all land at its full market value can collide with other policy objectives, such as providing affordable housing in cities, preserving the ambiance of old town centers, and preserving farmland and open space. Valuation of land in developed areas, where site values often are greatest, is more difficult, because, by definition, there are few vacant land sales. In this situation, indirect methods of estimating land values require estimates of building values, undercutting the economyof-administration argument. The resulting land value estimates would be more subject to challenge on appeal. Although it would be theoretically possible to tax 100 percent of land rents under an annual value tax, under a capital value tax, the greater the percentage of real or imputed rents that are taxed away, the smaller the tax base due to capitalization effects. Hence, there also is a revenue sufficiency problem with exempting buildings.

Another dimension along which differentials may be constructed is the value of each property or the total value of a taxpayer's property holdings. Such differentials can be created by imposing progressive tax rates. The rationale for progressive rates is "ability to pay." However, the strength of the argument for progressive rates is weak when applied to the value of individual properties. The value of individual properties can have little correlation to the income or wealth of the taxpayer, especially when the property is mortgaged. High marginal effective rates encourage the subdivision of parcels and other efforts to avoid them. Countries with progressive property tax rate structures are identified in Table 6.

In contrast, the Council Tax in the United Kingdom has a regressive structure—that is,

higher value properties have lower effective property tax rates (Almy, Dornfest, and Kenyon, p. 280). Sweden's local real estate fee also seems to have a regressive structure in that the fee is capped at SEK6,000 for oneand two-family dwellings and at SEK1,200 for apartment units. The fee rate for oneand two-family dwelling is 0.75 percent of assessed values, which implies that once the value exceeds SEK800,000, the fee reaches the maximum. The apartment unit rate is 0.4 percent, which implies that the maximum is reached at SEK300,000 in assessed value.

It is not uncommon for a mix of differentials to coexist in the same property tax system. Although they can result in apparent contradictions, it is difficult to evaluate their effects because of differences in bases for property taxes. Estimating *effective property tax rates* (taxes as a percentage of market value) would make it possible to do this when data on property prices can be obtained. However, it is generally reckoned that differentials on the order of 1:3 are sufficient to influence taxpayer behavior.

Infrequent revaluations can have the effect of introducing de facto differentials. For example, in 1976 the level of value of most real property in Germany was nearly 50 percent of market values, but agriculture land values were less than 10 percent of market values and forestland was less than 2 percent.

Defining classes can be difficult, and properties with multiple uses can create problems. In the United Kingdom, for example, special rules are needed for properties that contain residences and other uses (mixed use properties are called "composite hereditaments"). There also can be unintended consequences. For example, under Poland's area-based property tax, "corrections" are applied for low ceiling heights (ceilings less than 1.4 meters are not taxed, and ceilings between 1.4-2.2 meters are taxed at 50 percent). The second category creates an

<sup>1</sup> See Paugham, A. (1999), pp 34-37.

incentive to build new buildings with ceilings below 2.2 meters and possibly to construct false ceilings in existing buildings with ceilings over 2.2 meters.

### Personal Exemptions and Similar Relief Measures

In addition to differentials, there are several additional ways of providing property tax relief to residential property owners and occupants. See Table 6. These measures can be comprehensive, favoring all residential properties, or selective, favoring only the elderly, the disabled, those who provided qualifying military service, or those with lower incomes. Relief usually is restricted to a person's primary residence (in fact, second or holiday houses can be taxed at higher than normal rates). Relief can be given for only a portion of the assessed value (or area of the property), providing a further element of progressivity to a property tax system. Small, low-value residences are exempt from property taxes on grounds of "efficiency" (Netherlands). Other approaches for providing selective residential property tax relief are based on building area and area per family member. Residential property also can completely escape taxation (Belgium).

An application for such relief can be required, and eligibility can be verified ("means testing"). Eligibility can be based on some combination of age, property value, and family income. Another approach is to place limits on the proportion of income that can be taken by property taxes (these measures are called "circuit-breakers" in the United States). Property taxes in excess of the limit may be waived or rebated. In comparison to blanket measures, the aim is to target relief where it is most needed. Local governments may be compensated for the loss of revenue.

### **Deferrals and Abatements**

Some systems allow needy taxpayers to delay payment of property taxes temporarily without incurring any penalties other than perhaps interest. A number of property tax systems make it possible for elderly people to defer property taxes on their residences indefinitely. Any unpaid tax may remain a lien on the property, which is to be repaid when owner sells the property or is to be recovered from the owner's estate when he or she dies. The lien may be capped at the value of the property. Denmark allows taxpayers aged 65 years or more to defer the land tax related to either an owner-occupied dwelling or an owner-occupied summerhouse. OECD 1983 also reported that there was some possibility of deferring property taxes in France (in cases of hardship), Germany, Netherlands, Spain, Sweden (in cases of unemployment or sickness), Turkey, and United Kingdom.

Country	Differentials	Other Residential Relief Measures
Albania	Differential agricultural land tax rates are based on type categories and zone. The highest rate is about three times the lowest. Building rates are based on type and zone with a 4:1 ratio. Residential buildings are taxed at lowest rates.	
Armenia	Has a progressive rate structure for primary residences with marginal rates ranging between 0 percent and 0.8 percent.	For disabled and ill persons
Austria	Has a differential and progressive rate structure for agricultural and forest land, family houses, rental residential properties, and all other properties.	

Table 6: Differentials and Residential Property Tax Relief Measures

Country	Differentials	Other Residential Relief Measures	
Belarus	Has a complex system of differentials. Land tax rate differentials depend on land use, stage of development, zones within Minsk, and population of smaller municipalities. There also are rate differentials under the real estate tax with state- owned enterprises paying the highest rate, followed by private enterprises, and with individuals paying the lowest rate.	velopment, zones icipalities. There ie tax with state- Illowed by private	
Belgium	Belgium's property taxes are part of the personal and business income taxes. Personal income tax rates are progressive. Regarding differentials, certain properties, such a second homes, are assessed at 140% of cadastral incomes.Since 2005, the cadastral value of the taxpayer's dwelling no longer is inclu the income taxed under the personal tax. There is a tax credit for expenses in renovating low-rent dwellings.		
Bosnia- Herzegovina			
Bulgaria	Has a two-class progressive rate structure.	Primary residences receive a 50% reduction; the primary residences of certain disabled persons receive a 75% reduction.	
Croatia	The tax on country cottages is based on four age categories, with the newest category paying the highest rate per square meter. The taxes on country cottages and centers are decreased by 75% for citizens.		
Cyprus	Has a progressive rate structure with four classes with rates ranging from 0 percent (on values up to 1,000,000 Cyprus pounds) to 4 percent.		
Czech Republic	The rates for arable agricultural land (including forest and fish farming) is 0.75% of average (cadastral) price; the rate for other land, 0.25%. Differentials for developed (non-agricultural) land are 0.1 crowns per square meter for courtyards and residual land; 1 crown for developed land without buildings (multiplied by municipality size coefficients). Structure tax rates are: Dwelling houses, 1 crown per square meter; individual recreation (summer cottages, etc.), 3 crowns; garages, 4 crowns; business, 1, 5, or 10 crowns, depending on use; and all other, 3 crowns. All of the structure rates also are multiplied by coefficients for population of the municipality.		
Denmark	Maximum rates for the land tax range from 1.6 to 3.4 % and 1 % for the service tax (the property value tax rate is 1 %). The property value tax on residential properties has a two-tier progressive rate structure. Properties up to 2.6 million Danish crowns are taxed at 1%. Any value above this amount is taxed at 3%.	<ul> <li>their homes before 1998 and who are older than 67 (the amount of the relief depends on income and property value).</li> </ul>	
Estonia	There are differential rates for (1) arable land and natural grassland (0.1 and 2.0%) and (2) other land (0.1 and 2.5%). Municipalities can set different rates for value zones, and they can set the tax rate for forest land equal to the agricultural land rate.	A municipality may grant relief to the elderly (with tenure and use qualifications) and to the disabled an ill.	
Finland	The real estate tax rate that applies to buildings used for residential purposes ranges between 0.32 % and 0.75 %. The rate applicable to other kinds of immovable property ranges between 0.6 % and 1.35 %. Land used in agriculture and forestry is exempt.		

	Country	Differentials	Other Residential Relief Measures	
differentials in nominal rates for property owned by natural persons and enterprises (1:10) and especially between agricultural and non-agricultural land (b). Oxpricultural land tax rates depend on location, use classification, and quality rating; the range is 6 to 44 laries per hectare. Non-agricultural land tax rates depend no location. The base rate is 0.24 laries per square meter (2,400 laries per hectare).       Personal circumstances are not considered Germany and between agricultural and forest property and all other property. The average municipal levrage factor for the first category was278 and was 367 for the second. There are differential rates for various classes of property. There is a two-class progressive rate structure for single-family properties (0.26% for properties valued up to €38,347, and 0.35% above).       Relief is provided for the unemployed, the disabled, and families with four or more children. Tenants in leased dwellings are no liable for the duty.         Hungary        Exempt from the building tax are poor soci. housing and properties of less than 100 mi. in villages having fewer than 500 inhabitar In virtue is an income adjustment to these rates, which can be virtue or housing and properties are vieled.       Some reliefs are available.         Kazakhstan       Agricultural land tax differentials are based on plot area and and properties on the set are have for how-income businesses and housed by low or minus 50%, and the upper limit, by plus or minus 40%. Cadastral values on holiday houses	France	developed land (land andbuildings) is assessed at 50%. Under the new business premises contribution, property is assessed at 100% of rateable value, with the exception of industrial	property tax. Also, there are statutory allowances based on family size. The old and infirm with low incomes may qualify for special tax relief on their primary residence under the land and building tax and the housing tax. For example, low-income	
Germany and between agricultural and forest property and all other property. The average municipal leverage factor for the first category was278 and was 367 for the second. There are differential rates for various classes of property. There is a two-class progressive rate structure for single-family properties (0.26% for properties valued up to €38,347, and 0.35% above).Relief is provided for the unemployed, the disabled, and families with four or more children. Tenants in leased dwellings are no liable for the duty.HungaryThere are differentials. In the special duty on building age.Relief is provided for the unemployed, the disabled, and families with four or more children. Tenants in leased dwellings are no liable for the duty.IcelandThere are property type differentials. The maximum rate for residential property is 0.5%; the maximum for commercial is 1.32%.Exempt from the building tax are poor soci- housing and properties of less than 100 mi in villages having fewer than 500 inhabitar In addition, 25 m2 per resident is exempt.ItelandItelandItelandItelandKazakhstanAgricultural land tax differentials are based on soil type and ne varied by the commune. Rates are halved for low-income businesses and doubled for high-income businesses. The lower houses are increased by one third.KazakhstanAgricultural land tax differentials are based on soil type and are type. Other land differentials are based on soil type and 	Georgia	differentials in nominal rates for property owned by natural persons and enterprises (1:10) and especially between agricultural and non-agricultural land (1:60). Agricultural land tax rates depend on location, use classification, and quality rating; the range is 6 to 44 laries per hectare. Non-agricultural land tax rates depend on location. The base rate is 0.24 laries		
by electricity based on value zone and building age.disabled, and families with four or more children. Tenants in leased dwellings are no liable for the duty.Hungary Exempt from the building tax are poor soci housing and properties of less than 100 m2 in villages having fewer than 500 inhabitar In addition, 25 m2 per resident is exempt.IcelandThere are property type differentials. The maximum rate for residential property is 0.5%; the maximum for commercial is 1.32%IrelandItalyThere is an eight-by-ten matrix of rates under the Local Business Tax based on business activity and area. In addition, there is an income adjustment to these rates, which can be varied by the commune. Rates are halved for low-income businesses and doubled for high-income businesses. The lower income limit can be adjusted by plus or minus 50%, and the upper limit, by plus or minus 40%. Cadastral values on holiday houses are increased by one third.Some reliefs are available.KazakhstanAgricultural land tax differentials are based on plot area and 	Germany	There are differentials in assessments between East and West Germany and between agricultural and forest property and all other property. The average municipal leverage factor for the first category was278 and was 367 for the second. There are differential rates for various classes of property. There is a two-class progressive rate structure for single-family properties (0.26% for properties valued up to €38,347, and 0.35%		
IcelandThere are property type differentials. The maximum rate for residential property is 0.5%; the maximum for commercial is 1.32%IrelandItalyThere is an eight-by-ten matrix of rates under the Local Business Tax based on business activity and area. In addition, there is an income adjustment to these rates, which can be varied by the commune. Rates are halved for low-income businesses and doubled for high-income businesses. The lower income limit, by plus or minus 40%. Cadastral values on holiday houses are increased by one third.Some reliefs are available.KazakhstanAgricultural land tax differentials are based on soil type and area type. Other land differentials are based on plot area and on regional factors.Some reliefs are available.KosovoUse-type differentials are permitted. The maximum rangePrincipal residences receive a €10,000	Greece	by electricity based on value zone and building age. disabled, and families with four children. Tenants in leased dwell		
residential property is 0.5%; the maximum for commercial is 1.32%IrelandItalyThere is an eight-by-ten matrix of rates under the Local Business Tax based on business activity and area. In addition, there is an income adjustment to these rates, which can be varied by the commune. Rates are halved for low-income businesses and doubled for high-income businesses. The lower income limit can be adjusted by plus or minus 50%, and the upper limit, by plus or minus 40%. Cadastral values on holiday houses are increased by one third.Some reliefs are available.KazakhstanAgricultural land tax differentials are based on soil type and area type. Other land differentials are based on plot area and on regional factors.Some reliefs are available.KosovoUse-type differentials are permitted. The maximum rangePrincipal residences receive a €10,000	Hungary	housing and properties of less th in villages having fewer than 500		
ItalyThere is an eight-by-ten matrix of rates under the Local Business Tax based on business activity and area. In addition, there is an income adjustment to these rates, which can be varied by the commune. Rates are halved for low-income 	Iceland	residential property is 0.5%; the maximum for commercial is		
Business Tax based on business activity and area. In addition, there is an income adjustment to these rates, which can be varied by the commune. Rates are halved for low-income businesses and doubled for high-income businesses. The lower income limit can be adjusted by plus or minus 50%, and the upper limit, by plus or minus 40%. Cadastral values on holiday houses are increased by one third.Some reliefs are available.KazakhstanAgricultural land tax differentials are based on soil type and area type. Other land differentials are based on plot area and on regional factors.Some reliefs are available.KosovoUse-type differentials are permitted. The maximum rangePrincipal residences receive a €10,000	Ireland			
area type. Other land differentials are based on plot area and on regional factors.         Kosovo       Use-type differentials are permitted. The maximum range         Principal residences receive a €10,000	Italy	Business Tax based on business activity and area. In addition, there is an income adjustment to these rates, which can be varied by the commune. Rates are halved for low-income businesses and doubled for high-income businesses. The lower income limit can be adjusted by plus or minus 50%, and the upper limit, by plus or minus 40%. Cadastral values on holiday	r	
	Kazakhstan	area type. Other land differentials are based on plot area and	Some reliefs are available.	
	Kosovo			

Country	Differentials	Other Residential Relief Measures	
Latvia	There are use-type differentials, with residential property receiving the lowest rate.	Abatements are allowed.	
Lithuania	Under the Land Tax, coefficients are applied to tax value to produce a net taxable value. For agricultural land, land owned by construction partnerships engaged in the construction of apartment houses and private houses, land of consumer cooperatives, and operative companies, the coefficient is 0.35. For land of gardeners' partnerships, land plots used for economic-commercial and other activities, 0.5.		
Luxembourg	There are differntials.		
Macedonia	Use-type differentials are permitted.	Principal residences receive a 50% tax abatement.	
Moldova	Under the land tax, separate per-hectare rate ranges exist for rural property (2.28-16.97 roubles per hectare) and for urban property (0.05-1.50 roubles per square meter) Under the property tax, local option differentials are based on type of owner and type of property.	Relief is available to certain pensioners and invalids.	
Montenegro	Use-type differentials within the range of 0.08-0.8% are permitted.	Principals residences receive a 20% reduction for the taxpayer and a 10% reduction for each additional family member to a maximum of 50%. Taxpayers whose total holdings are assessed less than €5,000 are exempt.	
Netherlands	The owner rate cannot exceed 125 % of user rate. In practice, this means that a municipality cannot levy only an owner tax.		
Norway			
Poland	Rate ceilings are established for property use types. The lowest (residential) rate is 0.51 zlotys per square meter, while the highest (commercial) is 17.31 zlotys per square meter. Agricultural and forest buildings are exempt.	Persons in military service (from agricultura land tax)	
Portugal	Under the new formula valuation approach, property in a city or town can have a rate between 0.2% and 0.4%; city and town properties that have indexed values can have a rate between 0.4% and 0.7% (the rural property rate is 0.8%	Principal residences can have a temporary exemption of 4 or 8 years, depending on the value of the property. Certain low-income owners with properties valued less than €708 can be completely exempted.	
Romania	The land tax rate depends on which of six town or a city categories plot is located and on which of four value zones within the locality (the result is a four by six matrix of rates that range from 100 leis per square meter to 5,900 leis per square meter [in the center of Bucharest]). Agricultural rates are much lower and depend on agricultural use as well as the above factors. Minimum building tax rates range from 0.25% to 1.5% for legal persons; the rate is 0.1% for natural persons.	Veterans (extends to widows and to persons prosecuted under previous regime)	
Russia		Yes (disabled and ill) Persons in military service and veterans	
Serbia	Has a progressive rate structure ranging between 0.4 % and 2.0 %.	Yes (value reduction)	
Slovakia			

Country	Differentials	Other Residential Relief Measures	
Slovenia	The rates on buildings generally range from 0.1% to 1.0%, depending on the value of the building or part of a building in question. However, the rates for premises for rest and recreation range from 0.2% to 1.5%, and the rates for business premises range from 0.15% to 1.25% (the business rate is increased by 50% for certain business uses).	There is an exemption of 160 squre meters of buildings area. In addition, property taxes are reduced by 10% for every family member in a household with more than three persons. The poor are exempt from charge for use of urban building ground).	
Spain	The rate limit is 0.3% in rural areas and 0.4% in urban areas.		
Sweden	As noted, under the local real estate fee, dwellings and apartments have different rates (0.75 percent and 0.4 percent, respectively. Under the real estate tax, commercial property is taxed at 1.0 % and industrial property, 0.5 %. Other rates apply to power generation facilities.	t and 0.4 percent, ercial property	
Switzerland			
Turkey	Land generally is taxed at 0.1 %, while buildings generally are taxed at 0.2 %. Building sites, however, are taxed at 0.3 %, while dwellings are taxed at 0.1 %.		
Ukraine			
United Kingdom	The system of value bands under the Council Tax effectively establishes a regressive rate structure.	Single adult households receive a 25% tax reduction under the Council Tax. There also is a need-based relief scheme, under which it is possible to receive 100 percent tax relief. This is known as the Council Tax Benefit and is funded by the central government.	

### **Freezes and Limits**

Another strategy for providing property tax relief is to limit year-to-year increases in taxes while property values are increasing. A longstanding variant of this strategy is to continue to rely on values set in the distant past (sometimes called "base-year" values). In 2002, Denmark: enacted limits (sometimes called a "cap") on how much the property value tax and the land tax can be increased in a single year (the maximums are 5 percent and 7 percent, respectively).

### **Institutional Exemptions**

Countries commonly exempt from property taxation some or all of the property owned by certain types of non-profit organizations, provided that the properties are used for qualifying purposes. That is, the exemption is granted to a qualifying legal person, rather than a physical person or family. Common exemptions include property owned by: (1) governments (central, regional, and local governments) and used for governmental purposes (including property of foreign states, such as embassies); (2) institutions that provide charitable, educational, and other quasigovernmental services and used for stipulated purposes (such as non-profit hospitals); and (3) religious institutions and used for religious purposes. Usually institutional exemptions are complete (100 percent) and are of indefinite duration. Initial applications and periodic reapplications can be required.

Table 7 identifies cases in which categories of property that are usually exempt *are* taxable or are not fully exempt. Other unusual situations also are mentioned. For example, sports facilities are exempt in Denmark. As discussed in the subsection on incentives, agricultural and forest properties can be exempted in whole or in part.

Category of Exemption	Countries Not Exempting Category	Notes
Foreign embassies & consulates		Usually reciprocity is assumed
Government	Denmark (sometimes) Germany (sometimes) United Kingdom	In Netherlands, government properties pay contribution to polder boards.
Educational institutions	Denmark (sometimes) France (liable for land & building tax Ireland (sometimes) Netherlands (partly exempt) Sweden (sometimes)	Concessions: United Kingdom (rate reduction)
Hospitals	Denmark (sometimes) France Ireland (sometimes) Netherlands Switzerland	
Religious institutions	France (pays land tax) Ireland (sometimes) Netherlands (pays contribution to polder boards)	Not assessable: Denmark
Cultural & historical Germany (concessions) properties France Ireland Netherlands Poland Sweden Switzerland Turkey United Kingdom		Poland: If registered, provided they are in compliance with historic preservations regulations and are not being used for commercial purposes.
Cemeteries	Netherlands (pays contributions to polder boards)	Not assessed: Denmark

**Table 7: Unusual Institutional Exemptions** 

Two other categories of property are worthy of note. The first is public areas, open spaces, and environmentally sensitive land. Streets, public squares, and the like often are not assessed (that is, not separately identified and measured or valued). Denmark is an example. Other open space can be exempted (Ireland, Sweden, and United Kingdom) or pay reduced property taxes (Germany and Netherlands). Environmentally protected land is exempt in Estonia and Georgia.

### **Incentives and Disincentives**

Property tax incentives are intended to influence investment decisions and reward (or subsidize) certain economic activities. Incentives usually provide only a partial exemption. Except for agriculture, incentives usually are for a limited period, such as five to ten years. When they are of a fixed duration, they often are on a sliding scale basis. That is, the amount (percentage) of property tax relief is reduced in steps each year until the exemption is completely eliminated. Incentives available to individual properties often require an application, and they may be contractually enforced. That is, they are received only as long as contractual conditions are met. Penalties may be applied when property use is changed.

Turkey has extensive property tax preferences and incentives. They cover agriculture, fishing, shipbuilding, tourism, and industry. As with Turkey, properties associated with agriculture and forestry often are subject to special treatment. Agricultural and forest lands are exempt in Bulgaria and Finland. In Armenia and Estonia, property used in agricultural research is exempt. In Georgia, Lithuania, and Poland, temporary exemptions are granted for re-cultivated land or for using agricultural land more intensively. Poland also exempts enterprise garden plots. In France, agricultural and forest properties are exempt from the land and building tax. In Germany, agricultural land values are not indexed. In Hungary, land plots below municipality-determined thresholds are exempt. In Ireland, agricultural land is exempt as a result of a court decision. In Italy, rural properties are exempt from the tax on immovable property. Forest land is exempt in Lithuania. In Netherlands, agricultural and forestry land, including horticultural land, are exempt from the municipal tax (but not from contributions to polder boards). In Poland and Slovenia, buildings used in agriculture are exempt (forestry buildings also are exempt in Poland). The properties of agricultural enterprises are exempt in Russia. In Spain, forests may be temporarily exempt from the rural land tax. In United Kingdom, agricultural and forestry land are exempt.

Property tax incentives are used to encourage preservation of historic buildings, the renovations, and new construction. The Czech Republic allows expenses for maintaining historic buildings to be deducted from the property tax, which could easily exempt the property temporarily. New residential buildings have temporary exemptions in Bulgaria (five years), Romania (ten years for first homes), and Slovakia (fifteen years for new apartments). Czech Republic grants fifteen-year exemptions for restituted house, as long as the buildings are not sold and the taxes saved are used for repairs and improvements. In Germany, building values of new residences under certain size limits (particularly low-cost housing) are exempt for ten years. Germany also had a ten-year exemption for certain houses located in the five East German lander. Slovenia grants a ten-year exemption to newly constructed buildings and for renovated buildings when their values are

increased by 50 percent. Slovenia also exempts land for new buildings and for apartments from the charge for use of building ground for five years. In addition to the incentives they provide, such exemptions sometimes are justified on the grounds that the owners paid value-added taxes. In Sweden, new residential properties are exempt for five years after construction and receive a 50 percent exemption for the next five. Turkey also provides property tax relief for new houses.

In Poland, properties used in filmmaking are exempt. In Russia, newly organized enterprises receive a temporary exemption. In Ireland, mines are exempt from rates the first seven years after opening or re-opening. In Spain, mines are exempt from the rural land tax (but they are subject to a special tax).

In Germany, empty apartments are taxed at favorable rates. In United Kingdom, vacant properties receive a full exemption for the first three months of vacancy and a 50 percent exemption thereafter under the Uniform Business Rate. Under the Council Tax, vacant houses receive a 50 percent tax reduction.

Property tax relief for renovations and new construction can be offered on an awarewide basis. The goal is to stimulate property improvements and new development in an area that is economically depressed. Typically, all properties in a designated area have their property taxes frozen. Examples of such incentives include "enterprise zones" in Ireland and the United Kingdom.

Although not as common, higher (as opposed to lower) taxation also can be used as an incentive. Under this approach, property taxes would be lowered to the normal level if the desirable activity occurs. At one time the tax rate on unfinished construction in Belarus is ten times the rate on ordinary commercial enterprises. In Bulgaria, undeveloped plots are assessed at 125 percent. Lithuania taxed buildings that had been unused for more than one year at 5 percent instead of the usual 1 percent. It is unlikely that such punitive differentials are effective, especially when demand for the type of building in question is low or nonexistent.

### **Other Forms of Relief**

There are additional reasons for granting relief from ordinary property taxes. Socalled transitional relief is one. This form of relief can be granted to cushion the shock of increased property taxes following a revaluation or major property tax reform. If unchecked, dramatic increases in property tax burdens can be economically and politically destabilizing. Similar to the increase limits discussed previously, one approach to cushioning overall increases in property tax yields is to reduce rates to make the change in assessments revenue neutral. That is, total property tax yields, before and after the revaluation or reform, are held more or less constant (sometimes a small amount of growth in revenues is allowed). This approach, however, does nothing to control shifts within the tax base. A mechanism for transitional

relief that addresses shifts in burdens is to phase in changes in assessments either upward or downward over a few years. While such an approach doubtless pleases previously underassessed taxpayers, it delays relief to those who were previously over-assessed. In Denmark in conjunction with the residential Property Value Tax introduced in 2000, a scheme was devised to "hold harmless" taxpayers who acquired their properties before 1998. The United Kingdom has (very complicated) transitional relief provisions for transitional relief under non-domestic rates.

Disasters are another occasion in which special property tax relief can be warranted. However, Turkey in 2000 imposed a special extra property tax for one-year tax to pay for 1999 earthquake damages. The tax was equal to the property tax paid in 1999.

Finally, it should be noted that property tax relief can be provided indirectly. For example, property taxes may be offset against (deducted from) income taxes. Table 8 gives examples of such deductibility.

	From Personal Income Tax	From Corporate Income Tax
Czech Republic		Yes
Denmark	Yes	
Finland		Yes
France		Land & building tax and land tax
Germany		Yes
Ireland		Yes
Italy	No	
Netherlands	Yes	Yes
Norway		Yes
Spain	Yes	Yes
Sweden		Yes
Switzerland	Yes	Yes
Turkey		Yes
United Kingdom		Yes

#### **Table 8: Property Tax Deductibility**

### Economic, Fiscal, and Administrative Considerations

By reducing the property tax base, exemptions increase the proportional burden on other taxpayers and can reduce tax yields. To the extent that property taxes generally influence economic behavior, exemptions can be distortionary, because they can allow owners of exempt property to hold more property than they can use productively. The same can be true of other relief measures. Thus, there is an argument for keeping exemptions and other targeted forms of property tax relief to a minimum. In principle, relief measures should not be designed to benefit specific taxpayers or properties.

Sophisticated exemption and relief measures illustrate a dilemma. If exemptions and relief measures are liberally granted, some undeserving taxpayers will benefit along with deserving taxpayers. On the other hand, the more stringent the eligibility criteria are, the more costly administration becomes. In other words, there is a tradeoff between the revenue lost from unwarranted exemptions and the increased cost of administration when exemptions are carefully granted.

Administrative complications can arise when an exempt property is partly used for a non-exempt purpose. Options for dealing with such situations include denying the exemption altogether or exempting only the part of the property that qualifies for an exemption. For example, facilities like airports often are exempt, but parts such as the facilities used by private enterprises, including concessions like rental car agencies, shops, and so forth, often are taxable. These may be assessed and taxed under ordinary rules or subjected to payments in lieu of taxes.

Bulgaria disallows exemptions of buildings rented to third parties and buildings in certain resorts. In Czech Republic, state-owned land and buildings are exempt provided they are not used for business activities or rented (except to other state budgetary organizations). Poland conditions many exemptions on noncommercial use. Denmark exempts only for the parts of a property that qualifies; the balance is taxed. Ireland has an "exclusive use" test in the granting of exemptions to properties used for religious worship, education of the poor, charitable purposes, and state or public purposes.

Some types of property may be exempted from ordinary property taxation because they are difficult to value or because it is difficult to assign their value to a particular taxing district. Alternatively, they may simply be excluded from the tax base (not assessed). Examples of such properties include telecommunications systems; electricity, gas, water, and other public utility systems; railroads, pipelines, airlines, barge lines, and the like; and mines. However, privately owned telecommunication, utility, and transportation enterprises may be subject to an alternative means of taxation. Similarly, oil wells and mines may be taxed on the minerals extracted rather than attempting to estimate the value of un-extracted minerals.

Examples include the exemption of properties controlled by the Ministry of Transport in Bulgaria, transportation networks and utilities in Georgia, transport properties in Hungary, pipelines in Romania, utility and transport property in Russia, and electricity transmission property in Slovakia. The list of such kinds of property that are exempt in Poland is extensive and includes public roads and rights-of-way; structures used exclusively for public transport; structures used for the generation and transmission of energy, gas, heat, fuel, and water; sewage systems; water reservoirs, and water courses and harbors.

Exemptions may be granted for reasons of administrative convenience or efficiency. For example, Estonia exempts land that cannot be used economically, which is sensible as long as the conditions that prevent economic use prevail. Countries that do not issue property tax bills when the amount due is small include Estonia, Slovak Republic, and Slovenia. As previously noted, small, low-value buildings are exempted in Netherlands on efficiency grounds. A similar exemption exists in Denmark. Some differential property tax systems with very low tax rates on some classes of property result in property tax bills that are uneconomic to collect. In contrast to a policy of not taxing small or low-value properties on grounds of administrative efficiency, some believe that even the poorest taxpayer should pay a minimum tax, because doing so completes a "social contract." By paying tax, the taxpayer is entitled to hold public officials accountable for their performance.

## CHAPTER 9 ADMINISTRATIVE ARRANGEMENTS, PRACTICES AND ISSUES

### **Functional Assignments**

Property tax administration embraces (1) supervision and control; (2) fiscal cadastre maintenance, assessment, and sometimes valuation; (3) billing, collection (including enforcement of past-due obligations), and accounting for revenues; and (4) appeal. Sometimes these functions are performed by different tiers of government and organizations. In such a situation, ensuring good communications, cooperation, and smooth data flows can be difficult. Similar considerations apply to links to organizations outside of tax administration, such as the legal cadastre, surveying and mapping agencies, agriculture ministries, and so forth. Property tax administrations must deal with stakeholders

such as taxpayers (individually and through interest groups), tax recipients, and policy makers in legislative bodies. This section discusses different administrative options for carrying out the above responsibilities. It also addresses self-assessment, the role of the private sector, and automation. Available data on funding and staffing are presented.

Table 9 contains information about functional assignments assessment and collection. As can be seen, functional assignments may not be the same under the different recurrent taxes on immovable property in a country. Functional assignments also can be divided among two or more agencies. Aspects of the various functional assignments are discussed after the table.

Country	Assessment		Collection	
	Agency	Sub-Function	Agency	Sub-Function
Albania	Building registration agency		Local authority	Land tax
			Electric enterprise	Buildings
Armenia	Cadastre Department	Maintenance of cadastral records & valuation	State Revenue Ministry	
Austria	Ministry of Finance	Valuation	Communes	
Belarus	National Cadastral Agency & State Tax Inspection	Assessment	State Tax Inspection	
Belgium	Federal Public Service Finance		Federal Public Service Finance	
Bosnia- Herzegovina				
Bulgaria	Central government	Determines the valuation methodology	Municipalities	
	Municipalities	Assessment		

Table 9: Administrative Arrangements for Assessment and Collection

Country	Assessment		Collection	
	Agency	Sub-Function	Agency	Sub-Function
Croatia	Central Government & Municipalities	Assessment	Municipalities	Collection
Cyprus	Department of Land & Surveys	Valuation	Inland Revenue	Collection
Czech Republic	Financial offices (under MF)	Taxpayers are required to submit a return annually.	Central (Financial offices)	
Denmark (since 2002)	Central Customs and Tax Administration	Valuation	Municipalities and Counties	Land & service taxes: All billing and collection functions
			Central Customs and Tax Administration	Property value tax collection
Estonia	National Land Board	Market monitoring & valuation modeling	Central (Local offices of National Tax Board)	
	County cadastral offices & local governments	Carry out revaluations by applying models to individual properties		
Finland	Finnish Tax Administration (FTA)		Regional offices of FTA	
France	The Cadastre	Register land plots and premises	Central government	
	General Tax Directorate (Direction Général des Impôts)	Valuation		
	Local governments	Assist with property identification and data collection		
Georgia	Ministry of Finance	Oversight		•
	Enterprises	Assessment of enterprise property	(Central) Tax Inspection of Georgia	
	Municipalities / Inventory bureaus	Assessment of property of physical persons		
Germany	State tax offices	Valuation	Municipalities	Set leverage coefficients
		Set base rates		Collect
Greece	Local governments		Local governments	
Hungary	Local technical departments	Residential property data	Local	
	Local tax departments	All other functions		
Iceland	Registers Iceland	Valuation		
Ireland	Valuation Office	Valuation		
	Local authorities	Preparation of valuation lists		
Italy	Communes		Local (Communes)	
Kazakhstan	Local governments		Local Governments	
Kosovo	Cadastral Agency	Property register	Municipalities	
	Municipalities	Valuation		
Latvia	State Land Service	Valuation	Central (State Revenue Service)	Control
			Local governments	Notices & Collection

Country	Assessment		Collection	
	Agency	Sub-Function	Agency	Sub-Function
Lithuania	State Enterprise Center of Registers	Maintain land & building attributes; valuation	Mixed (STI with assistance from municipalities)	
	State Tax Inspectorate (STI)			
	Enterprises	Self-assessment		
Luxembourg				
Macedonia	Ministry of Finance	Methodology		
	Local governments	Valuation	Local governments	Collection
Moldova			Fiscal Inspectorates	Collection
Montenegro	Department of Real Estate	Register of Properties	Municipalities	Collection
	Ministry of Finance	Valuation methodology		
	Municipalities	Assessment		
Netherlands	National Valuation Board (Waarderingskamer)	Supervision (including ratio studies & approval of revaluation plans)	Municipalities	Collection
	Municipalities	Cadastre maintenance, valuation		
Norway			Local Governments	Collection
Poland	Regional offices	Maintains records on 56%	Local authorities	Billing & collection
	Municipalities	27%	Tax offices	Enforcement
	Vovoidships (central government administrative units)	7%		
Portugal	General Direction of Taxation (DGCI municipal valuation committees)	Valuation of urban & some rural properties	DBCI	Urban
	Geographical and Cadastral Institute (IGC)	Valuation of other rural properties		
Romania	Local authorities		Local authorities	
Russia	Bureaus of Technical Inventories	Assessment of buildings	Local authorities	Mail land tax bills
	Ministry of Taxes & Duties	Maintain registers of taxpayers	Ministry of Taxes & duties	Collects all property taxes
Serbia				
Slovakia				
Slovenia	Local authorities		Tax authorities	
Spain	Property Register and Tax Assistance Administration Center (CGCCT) Area Managements (Gerencias Territorales)	Valuation & assessment	Local or regional collection agencies	
Sweden	National Land Survey	Valuation	National Tax Board	
	Tax authorities	Assessment		
	Land register authorities	Land register		
	Local real estate assessment boards	Assist with valuation		

Country	Assessment		Collection	
	Agency	Sub-Function	Agency	Sub-Function
Switzerland	Cantons or communes		Cantons or communes	
Turkey	Ministry of Finance, Property Tax Department		Municipalities	
Ukraine				
United Kingdom	Valuation Office Agency(England & Wales)	Valuation	Local Authorities	
	Local assessors &Valuation Office (Scotland)			
	Valuation and Lands Agency (Northern Ireland)	Valuation & assessment		

#### Supervision

There is a need for a supervisory or control function when overall responsibility for property tax administration is divided among different agencies and tiers of government. Each agency or unit of government needs to be held accountable for carrying out its responsibilities properly and in a timely fashion. A smooth flow of information and data throughout the property tax system needs to be ensured.

When local governments have considerable latitude in setting tax rates, granting exemptions and relief, and the like, safeguards are needed to prevent a few local governments from under-assessing or under-taxing property in hopes of receiving a larger grant from the central government. This issue arises when a factor, such as taxable value per capita, is used in calculating the amount of the grant. There also is a need to guard against local corruption.

In Europe, supervision generally is the responsibility of the ministry of finance (MF). It usually proposes legislation, prepares regulations, and generally oversees the taxation of property. There may be administrative roles as well. These may be assigned to an agency in charge of tax administration. Such agencies can be an arm of the MF. In Netherlands, the National Valuation Board supervises municipal performance.

#### Assessment and valuation

As noted, the term "assessment" encompasses all the processes needed to produce an assessment list, which is a list of properties (or taxpayers) and the factors (such as property use, area, value, eligibility for exemptions, and so forth) that determine property tax liabilities (loosely, the "fiscal cadastre"). This section discusses the varying institutional arrangements for identifying taxpayers and taxable properties, classifying them for purposes of taxation, valuing property, and granting of exemptions and other forms of property tax relief. The role of taxpayers also is considered.

As can be seen from Table 9, there are many different organizational designs for managing the fiscal cadastre (maps and records identifying taxpayers and taxable properties). Responsibility for the fiscal cadastre may rest with the central government or given to local governments. At the central government level, organizational options include a surveying authority like Lithuania's State Enterprise Center of Registers and Slovenia's Surveying and Mapping Agency; a specialized agency; and a part of the tax administration, such as the Valuation Office Agency in the UK.

Valuation agencies may be part of the tax administration (see OECD, Forum on Tax Administration 2011) or part of another agency. They may have considerable discretion regarding the valuation approach to employ, or they may be constrained to follow a regulation, which may or may not be grounded in analysis of property markets. Moreover, responsibility for the two main property tax valuation activities (the development of valuation models or methods and, second, the application of those models to individual properties) may be given to a single agency or the responsibility may be divided. Sometimes taxpayers are responsible for the latter activity (as in Turkey). Spain is among the countries that develop models centrally and apply them locally. There, the Property Register and Tax Assistance Administration Center (CGCCT) monitors markets and develops valuation models that are applied by sixtyfive subordinate regional organizations (area managements or Gerencias Territoriales).

One reason for assigning responsibility for valuation to the central government is that valuations for the property tax may be used for other purposes, such as forming part of the base of another tax. Valuations made for the property tax can be used in a net wealth tax (Austria). In Italy, cadastral values (presumptive annual values) are used as imputed income from owner-occupied houses and certain agricultural activities under income taxes. In addition, property tax valuations may be used as a test of the reasonableness of declared values under transfer taxes, gift taxes, and inheritance or estate taxes. When the assessed value is higher than the declared value, it may be used as the basis for the tax (Sweden). Property tax values also can be used for insurance purposes (Iceland).

In Netherlands, valuations made for municipal property tax assessments are used for water (polder) board taxes on built property and the central government taxes on imputed income.

#### Billing, collection, and enforcement

Decisions regarding the assignment of responsibility for billing and collecting property taxes involve consideration of administrative capacity, taxpayer convenience, and fiscal interest. Often, the recipients of property tax revenues (such as municipalities) want some responsibility for property tax administration. Their interest in being responsible for collection has to do with gaining access to revenues sooner. They also have a direct interest in getting taxpayers to pay their taxes on time and, consequently, often are willing to take necessary enforcement actions.

Taxpayer convenience is achieved by having collection points near their homes and by allowing payments to be made by post, via the Internet, with utility bills (Greece), through banks, or other convenient means. Except when the taxpayer lives in another community (or state), local governments can provide convenient collection. Administratively decentralized collection agencies can provide similar convenience.

#### Appeal

As will be discussed, property tax appeal systems differ from the systems that address appeals of an administration's override of a self-assessed tax. Administratively, property tax appeal systems typically consist of several hierarchical steps. Initially, appeals are heard locally and informally. It is common to have appeals initially lodged with the assessment agency. It also is common to use committees to hear subsequent appeals. Sometimes the committees are composed of ordinary citizens; sometimes they are composed of people with expertise in valuation matters. For example, a panel of valuers hears appeals in Portugal. As appeals are taken to higher levels, the hearing body has broader geographic jurisdiction. At the highest level, appeals are to the courts. As examples, Austria, Denmark, Netherland, and

Sweden have three-stage property tax appeal processes. In Ireland and United Kingdom, appeals initially are lodged with the assessor (the valuation office). Subsequent appeals are taken to specialized tribunals.

#### The role of taxpayers and self-assessment

Arguably, the collection and maintenance of information about land and buildings is the most expensive facet of taxing immovable property. In the United States and other countries, inspectors from property tax administrations do this work, which increases administrative costs. In Europe, taxpayers are required to help, thereby reducing administrative costs (while increasing their compliance burdens). Other considerations come into play. Relying on taxpayers to provide information also means that a lot of information can be obtained quickly-sending trained inspectors into the field typically is time-consuming. On the other hand, it is more difficult to ensure the accuracy of information supplied by taxpayers. Even if they want to supply complete and accurate information, they may lack the technical expertise.

Whether administrative agencies are primarily responsible for cadastral data collection and assessment or not, most property tax systems require taxpayers to provide information needed to administer the tax. Taxpayers can be obliged to provide information only on request, or they may have specific annual or event-based reporting taxpayers requirements. For example, commonly are required to disclose ownership of property, prices paid for property and the circumstances of sales. In annual value systems, owners or occupants typically are required to disclose rents paid or received, lease provisions, and, perhaps, expenses in maintaining the property. As discussed, taxpayers can be required to list and describe their property holdings. They also may be required to notify the tax administration of any changes in ownership or property attributes

(examples include Bulgaria, Macedonia, Montenegro, Romania, Slovenia, and Turkey). Sometimes, taxpayers are required to calculate the assessments on their properties. This is particularly true of area-based property taxes and property taxes paid by legal persons in some former socialist countries. Czech Republic, Macedonia, Moldova, Poland, Slovak Republic, and Sweden are among the countries that require residential taxpayers to submit a return describing their properties. In Czech Republic, owners whose property holdings exceed 1 million Czech crowns in value are required to submit a return every three years. In Czech Republic, taxpayers also figure how much tax they owe. In Turkey, the taxpayer must figure both her or his valuation and the amount of taxes due. Tax return forms contain the information needed to calculate building values. Land value rates are published in books available in tax administration offices.

In countries where enterprises were originally state owned and well disciplined, property taxes paid by enterprises are self-assessed (usually using data from balance sheets). The countries include Armenia, Belarus, Georgia, Lithuania, Poland, Romania, and Russian Federation.

In Denmark and Sweden, buyers or their lawyers are required to fill out a sales report form. Every four years, the Danish Ministry of Housing and Urban Affairs requires owners of rental properties to report total annual rent (including the rental value of any owner-occupied premises). In Netherlands, municipalities have the power to require owners to submit returns. Owners and tenants must supply rental information. Owners may also be required to give opinions of the value of their properties. In Sweden, taxpayers also are obliged to file returns on non-residential properties. They are used to obtain rental information and construction details. The return forms contain a mixture of questions and pre-printed data, which the owner is to verify.

Laws concerning self-assessment and other forms of mandatory reporting ordinarily provide audit powers and sanctions to enforce compliance. In Georgia and the Russian Federation, taxpayers are required to maintain adequate records. In any event, it is important to consider the reasonableness of taxpayers' compliance burdens (the necessity for the information requested and the costs of providing it). A practice to avoid is charging fees essentially for the privilege of being taxed, such as the fees charged by some inventory agencies for valuations made when property ownership is registered.

# Private sector roles in property tax administration

Private-sector companies can be asked to provide services that once might have been provided by civil servants (or by taxpayers). Information technology (IT) and land surveying services probably are most common. However, valuation and collection services also are commonly procured. In Netherlands, municipalities increasingly contract with companies for valuation services (about half rely on firms and about half rely on governmental departments staffed with civil servants). Private-sector valuers and real estate agents in England and Wales did about 50 percent of the work involved in assigning residential properties to bands under the Council Tax. Other countries have drawn upon companies on a smaller scale. Both the Czech and Slovak ministries of finance engaged nongovernmental institutions and private firms to help develop valuation methods and land value maps. Similarly, the Estonian National Land Board has contracted with private valuers for help during its revaluations. As noted, privatesector valuers are used in appeals in Portugal.

Another trend that is evident is the creation of specialized governmental organizations to furnish the services needed to administer property taxes. Some actually are governmentally owned corporations. All are

authorized to provide services for a fee instead of relying exclusively on appropriations from governmental budgets. An example is the Lithuanian State Enterprise Center of Registers, a governmental enterprise that bridges the gap between a pure governmental agency and a private company. Other countries, including Armenia, Georgia, and Montenegro have created "self-funded" land and property record agencies.

By consolidating land title-related functions and valuation functions in a cadastral agency, some of the difficulties in coordinating work and data flows can be avoided. However, it can be desirable to separate property taxrelated activities, such as property attribute data collection and valuation, from activities related to title registration. That is, the legal cadastre should be kept distinct from the fiscal cadastre. If buyers believe that one of the "costs" of title registration is property taxation, they will have an incentive to avoid registration or conceal the true nature of the transaction.

The creation of an umbrella agency is not a panacea. Mandating that such an agency provide services related to administering a property tax without adequate compensation risks inadequate performance, unfairly transferring costs to customers paying for other services, or both. The agency can come to regard essentially public information about taxable properties as proprietary. Attention to the governance of the organization can avoid such issues.

### **Cadastral Systems**

The term "fiscal cadastre" loosely refers to the totality of records of assessable properties, taxpayers, assessments, and tax obligations. Historically, there have been two basic types of fiscal cadastres: person (or taxpayer) based systems and property-based systems. Personbased cadastres have ancient origins and basically are lists of persons (physical or legal) and information about the properties they are known to possess. Although it is possible to list properties, by street, for example, property-based cadastres have been map-based since the Austro-Hungarian Empire perfected their conceptual design, which combines a geodetic control network, a coordinate system, cadastral maps and land registers.

Only by organizing land and building records geographically can a property tax administration be confident that all assessable properties have been discovered and correctly described. If a property is valuable and the property tax administration is conscientious, someone eventually will come forward and pay the property taxes due on it if there is a risk that a government can seize it. Person-based systems, in contrast are crucially dependent on owners declaring their property holdings. Modern computer systems (with relational database management systems) make it possible to present information either way.

Subsystems of a modern fiscal cadastre include a cadastral mapping and parcel identification system, land and building attribute databases, market evidence databases (in value-based property tax systems, and taxpayer record systems. See Table 10.<sup>1</sup> They can contain records of tax obligations, payments, and amounts due.

A modern land cadastre is part of a computerized geographic information system (GIS). The GIS holds digital orthophotographic base maps over which property boundaries, building outlines, and other data are overlaid. Increasingly, oblique aerial photographs of buildings are maintained. They can be used in detecting physical changes to buildings and in making measurements precise enough for property tax purposes.

During the socialist era, pre-war cadastral systems tended to be neglected in Central and Eastern Europe. However, the Soviet Union developed an interesting system of housing bureaus records. Technical maintained "passports" for each building and apartment. А passport contained information construction materials, the size of the building or unit, and a perimeter sketch or floor plan. The drawings, dimensions, and area measurements were approximate. A passport may also have contained a sketch of the land allotted to the building.

Country	Cadastral System	Valuation System
Armenia	Recognizing the need for modern map-based legal and fiscal cadastres, the Cadastre Department was created in 1997. Its functions include property title registration, property valuation for tax purposes, and monitoring. The department began title registration in 1998. It compiles digital cadastral maps and maintains the inventory of buildings. An integrated land and building database is being constructed	Enterprise properties were valued on the basis of book value. After 1998, all buildings are to be valued on the basis of a valuation regulation. Originally, estimates of replacement costs of structures were modified by coefficients designed to make taxable values reflect some market factors. Basic cost rates per unit were adjusted upward to convert from Soviet rubles to Armenian drams and to account for inflation. Then the indexed costs were adjusted downward for factors that were assumed to diminish the value of the structure. The highest possible valuation was 0.98 of the inflation-adjusted base rate. The lowest was 0.00945. The factors reflected in the valuations included structural integrity, age, available infrastructure and facilities, story level, and geographic location (zone). There are separate multiplicative valuation formulas for apartments and for detached houses and ancillary structures. The new methodology wass estimated to produce values that are 85% of market prices, up from about 45% of market prices.

#### Table 10: Information about Cadastral and Valuation Systems

<sup>1</sup> For more information on cadastral systems, see Manthorpe (2005), and for valuation systems, see Federal Land Cadastre Service of Russia (2001).

Country	Cadastral System	Valuation System	
Austria	Austria has a modern digital cadastre that comprises digital maps, a GIS, and a web portal.	A 1955 value basis is used (Fiedler 1998).	
Belarus	The Committee on Land Reform and Land Organization maintains records of land plots and land users. Buyers and sellers are required to disclose sales prices.	The valuation date for the property of legal persons was 1 January 1994. The national statistical agency supplied the valuation data.	
Belgium	The Federal Public Service Finance is responsible for maintaining property tax records.	Cadastral income is a notional income deemed to represent the net annual income from the premises concerned, at the price of the year used as a reference for the most recent official valuation procedure (1975). Cadastral incomes have been indexed since 1990. For the year 2010, the adjustment coefficient was 1.5461.Values were not indexed in 2011.	
Bulgaria		The law contains periodically updated coefficients for normative land and building book (balance) values. Four coefficients are used to adjust base values per m2 for land, and five are used for buildings.	
Cyprus	The Department of Lands and Surveys (DLS) maintains a multipurpose land information system that is partially computerized. Buyers and sellers are required to disclose sales prices	The DLS is responsible for valuation. Values are as of 1 January 1980 (a revaluation is proposed).	
Czech Republic	The Ministry of Finance maintains an information system, which has links to the real property cadastre and the population register.	The MF initiated two valuation pilot projects, one in a small municipality and another in a region of Prague. The aim was to develop simple price-per-square-meter models.	
Denmark	The Central Customs and Tax Administration maintains the sale register used in valuation. The National Survey and Cadastre maintains digital cadastral maps and supplies the land information used in property taxation. There is an address system that allows buildings to be located with near certainty. No field inspections are routinely conducted; much of the information about properties is from a 1976 owner questionnaire. Buyers are required by law to disclose prices and property details. Valuation lists, sales registers, and sales ratios are made public.	The Central Customs and Tax Administration develops mass appraisal models, relying on the sales comparison approach in the valuation of land and residences. The income approach is used for rented properties when sales are infrequent, and the cost approach is used for other types of property. Separate estimates of land values are made for the Land Tax. Under the Service Tax, building values are derived from estimates of total property value minus estimates of land value. Estimates of total property value are made for the Property Value Tax. Mixed-use properties, such as business properties that contain an owner-occupied residence, require further separate estimates of each taxable component of the total property. Four types of land value models are used: (1) an industrial/public use model, (2) a family house model, (3) a model for apartment blocks (and commercial uses), and (4) an agricultural model. Properties are revalued every two years, with residential properties be revalued in one year and the other categories of property being revalued in the next.	
Estonia	There is a land cadastre and title book. Land tax records are organized by taxpayer (difficulties have been encountered). Cadastral maps are digital.	Land value base rates are based on sales comparisons (where there are enough sales). Separate rates per square meter for each property type in each zone are developed. Initial valuation models took into account the size of the municipality, the influence from the nearest larger municipality, and the quality of the municipality. In rural areas, where there is little direct market evidence, values are extrapolated from areas where there is some evidence, so that there is a rational pattern in which similar properties have comparable values. Base rates developed from the mathematical calibration methods were reviewed by experts and sometimes modified to produce a more logical result. Experts also decided the zone rates based on available market information. Revaluations 1993 and 1996 made it possible to take into account new information and correct past mistakes. Agricultural, forest, and some urban lands are valued on the profits basis.	

Country	Cadastral System	Valuation System	
France	The cadastre historically served as the basis for property taxation. It is compulsory to designate properties by their cadastral numbers for registration purposes. Owners are required to submit a form detailing changes in property attribute data. Tax lists are public.	Ratable value (valuer locative cadastrale) is based on highly generalized per-unit models (tarifs) by type and sub-type of property. To compensate for the lack of a recent revaluation, coefficients are used to update values, but they are at less than current market levels. Values are recognized as being inequitable. In defining annual rental value, instead of actually analyzing expenses, a standard percentage is deducted from gross rental values to account for expenses. Fifty percent is deducted under the Land and Building Tax (baties) and 20%, under the Land Tax (non-baties). The difference in percentages reflects building maintenance costs.	
Georgia	Following independence, projects to create parcel-based legal and fiscal cadastres began, using available land and building records.	Inventory bureaus initially used Soviet-era insurance cost manuals in the valuation of buildings.	
Germany	Cadastral systems are the responsibility of the states. For the most part, the cadastres are digital, and there is national interest in integrating them .	The property tax is based on fiscal value, which for residential and commercial property is determined as a multiple of the average rent per m2 that could have been obtained for a comparable property. The multiples vary with such factors as size of community, age of structure, exterior construction, and use. Industrial properties are appraised using a summation approach. Construction costs are figured on a cubic meter basis. Use and construction quality are taken into account. Urban land values are based on average prices per m2. Although the law requires values to be updated every six years, the values are based on 1964 values indexed to 1974. Farmland is valued on the basis of soil classifications established in 1935. Fiscal values usually are lower than actual values. Valuers use officially adopted manuals.	
Hungary	County fee offices (Illetikhivatal) maintain records related to property transactions. The legal cadastre is managed by the land offices (Földhivatal). Land records include identification of the owner, rights possessed and restrictions. They are organized by parcel identification number and detailed on maps. Technical departments, which may cover several municipalities, register building permits, local master plans (zoning), and public utility information. These data generally are not integrated.		
Iceland	Registers Iceland is responsible for property and populations registers and for valuation. Buyers and sellers are required to disclose sales prices.	Properties are revalued annually. Multivariate sales-based models are used in the valuation of dwellings, including condominiums. Eleven models were developed in the 2009 revaluation of dwellings (including condominiums). The income approach can be used in the valuation of rented properties.	
Ireland		Local rating authorities are responsible for preparing and maintaining valuation lists. When they believe that the valuation of a property has changed (due to new construction or any other reason), they file a request with the Valuation Office for a new or updated valuation. Legally, the Valuation Office must process the request within six months.	

Country	Cadastral System	Valuation System	
Italy	The Agenzia del Territorio is responsible for the fiscal cadastre.	Building value estimates are based on factored "cadastral values." They are presumptive annual incomes, not actual rental incomes. However, they represent average or normal income. The capitalization factor for residential property is 100, while it can be 34, 50, or 100 for non-residential property, depending on how the property is used. Sales prices are used in the valuation of land under development.	
Latvia	The State Land Service (SLS) is responsible for property registers. The registers are part of a geographic information system. Buyers and sellers are required to disclose sales prices.	A valuation unit of the SLS is responsible for valuation. Land was valued in 1998, and buildings were valued in 2000. The land valuation program had four phases: development of the principles of mass appraisal, preparations, carrying out the valuation, and completion of municipality taxpayer lists. The work had to be completed in a short time and with limited resources. Consequently, simple valuation models and currently available data were used. Preparations included estimating the amount of work to be done; surveying available resources (funding, staffing, and technical resources); elaborating the valuation methods; updating the legal framework, developing computer solutions; and training. Rural land was valued first, because available data were more complete. Except in Riga and its surroundings, taxpayer lists were completed in January 1998. Valuations now are on a five-year cycle.	
Lithuania	The State Enterprise Center of Registers (SECR) is responsible for the cadastre and for valuation, among other things. Buyers and sellers are required to disclose sales prices.	The SECR has developed programs for valuing major categories of immovable property. Residential properties and land are valued using the sales comparison approach. Its valuers monitor market trends and quarterly revise the average values of land value zones.	
Macedonia	Each municipality is responsible for keeping a register of assessable real estate. The municipal registers are supposed to be harmonized with the legal cadastre maintained by the central government.	As noted, the MF is responsible for promulgating a valuation methodology, which municipalities are to apply.	
Moldova	The Agency of Land Relations and Cadastre maintain records of taxable land plots and buildings. There is a separate register of enterprises.	A revaluation of enterprise property began in 1996. The basis of value was book (balance sheet) value indexed for inflation.	
Montenegro	The central government's Department of Real Estate maintains records of registered properties. Municipalities maintain records of assessable properties within their boundaries.	The MF is responsible for promulgating a market-based valuation methodology, which municipalities are to apply. The law requires the methodology to be updated every three years.	
Netherlands	The cadastral agency maintains the digital cadastral maps used in property taxation. Property attribute data are obtained from field surveys, and officials have the right to enter properties. Buyers are required by law to disclose prices. Municipalities are required to update a sales register continuously and to collect information on rentals and construction costs. Property tax data generally are not public.	The law specifies the general methods municipal valuers are to use in appraising property. The valuers are free to choose the method or methods. Basically, sales comparison methods are used in residential property valuation, and income capitalization is used is used in non-residential property appraisal, except special-purpose properties. There is a national "network" of reference properties, whose valuation coefficients must be used. The cost approach also is used. Depreciation is allowed. Revaluations are required every four years.	
Norway	The Norwegian Mapping and Cadastre Authority (Kartverket) is responsible for property registers. There is a register for each municipality.		

Country	Cadastral System	Valuation System
Poland		Computer-assisted mass appraisal methods have been tested in Krakow.
Portugal	The real property register is part of a cadastral reform project that incorporates geometry.	When Portugal converted from annual values to capital values, initially the existing annual values were converted by capital values simply by applying coefficients (capitalization factors). Now an additive model is used in valuing dwelling houses. It has four components: the value of the building and the land on which it rests (V1), the value of any additional land, the value of outbuildings, and an adjustments component. V1 itself is based on a multiplicative model (gross area * price per square meter (probably estimated construction costs) * adjustment coefficients for location, depreciation, etc.). Rural land is assessed on a soil productivity basis. Valuation committees are composed of two valuers appointed by DGCI and one by the municipality. There are rural and urban valuation committees
Romania	Romania relies on a taxpayer register. However, there is a National Agency for Cadastre and Land Information.	The building value regulation takes into account construction type, property use, and plumbing, heating, and electrical equipment. Deductions from basic values per square meter are made for depreciation. There have been revaluations to account for inflation. There are plans to recreate a valuation authority. Agricultural land will be valued on the basis of productivity.
Russia	Major projects to build a modern land cadastre and maintain building records have been launched. The State Revenue Service maintains registers of individual taxpayers and enterprises in each municipality. Bureaus of technical inventory maintain files on buildings. The files contain a copy of the passport. Buyers and sellers are required to disclose sales prices	Buildings initially were valued on the basis of an insurance value regulation last updated in the 1980s. Those values were indexed for currency changes and inflation. Enterprise assets are valued on the "average" balance sheet value (defined as (1) the sum of (a) 50% of the value at the beginning of the first month of the tax year, (b) the value at the beginning of each of the next eleven months, and (c) 50% of the value at the beginning of the first month of the next tax year; (2) all divided by 12). Depreciation is allowed. In 1999, the Federal Land Cadastre Service launched a national land revaluation project incorporating market evidence where it existed. Cadastral values became the basis for the land tax in 2006.
Serbia	Serbia has a World Bank-financed Real Estate Cadastre and Registration Project. The central government's geodetic authority is responsible for the cadastre.	Agricultural and forest land is valued at five times its cadastral income.
Slovakia	The cadastre is the responsibility of the Geodesy, Cartography, and Cadastre Authority. Buyers and sellers are required to disclose sales prices	
Slovenia	Slovenia has completed a massive real estate registration modernization project. The project included the development of computerized title records, cadastral records and maps, and a property tax administration system. The legal cadastre is based on the German land book (grundbuch) model.	In 2012, a new mass valuation system became effective, but as yet property taxes are not based on current market prices. Buildings are valued according to a "point" system. The number of points assigned a particular building depends on such factors as age, equipment, and location. A base value per square meter is multiplied by the number of points to arrive at a value per square meter, which in turn is multiplied by the useful area of the building to arrive at its taxable value. The cost of living index is used to update point values annually.
Spain	The General Directorate of the Cadastre is responsible for the property register. Buyers and sellers are required to disclose sales prices	The Property Register and Tax Assistance Administration Center makes market surveys, determines market areas, and develops models that underlie valuation proposals that are developed regionally. Separate values are developed for land and for buildings.

Country	Cadastral System	Valuation System
Sweden	Land titles are registered. The cadastral agency maintains the digital cadastral maps used in property taxation. Owners are required to submit a form detailing changes in property attribute data. Although field inspections also are made, owners have no obligation to cooperate. Buyers are required by law to disclose prices. Taxpayers and others can access tax records online. Computerized sales and property attribute files are maintained.	Residential properties are valued using computerized comparable sales methods. Separate values of land and buildings are determined for single-family houses; for other types of property, total value and land value are estimated, and building value merely is the difference. The valuation process requires the delineation of market areas.
Switzerland	Property attribute data are obtained from field surveys, and officials have the right to enter properties. Buyers are required by law to disclose prices. Property tax data are not public.	
Turkey	The Directorate of Land Registry and Cadastre is responsible for the registers used in property taxation. Buyers and sellers are required to disclose sales prices Turkey is in the midst of a World Bank-funded Land Registration and Cadastral Modernization project.	Minimum land tax values are set by the tax administration for each site in towns, cities, and villages. The Property Tax Department publishes land value books, which for each municipality give land value rates by street and sometimes by street segment. The declared value may not be less than a fixed minimum value. The value of a building generally is fair market value, but it may not be less than the sum of the construction costs fixed by the MF and the Ministry of Public Works, taking into account the value of the land. The property tax returns contain basic building value schedules.
United Kingdom	Property attribute data are obtained from field surveys, and officials have the right to enter properties. For the non-domestic rates, registries maintain a continuously updated inventory of all properties organized by title. These are being computerized. Buyers are required by law to disclose prices for the Stamp Duty (transfer tax). Rental data also must be disclosed.	In the UK, revaluations are supposed to be made every five years. After a revaluation, a new valuation list is produced. It remains in force (with amendments) until the next revaluation (because in an era of handwritten lists, it was not feasible to regenerate lists annually). Amendments to a list may be made by a valuation officer acting on her or his own initiative or—more usually—as the result of request ("proposal") by an interested person (such as the taxpayer) or by the rating authority. The valuation officer may decline to accept the proposal, which decision may be appealed. The amended valuation also may be appealed.

### **Valuation System**

As with other aspects of property tax administration, there options in designing and operating valuation systems (see Federal Land Cadastre Service of Russia, 2001). One is the ambition of the system: is the system to produce values that are close to current market values, or are the values to be only distantly related to market values? In any case, since true market values are unobservable (only prices are observable), some divergence between estimated (cadastral) values and actual prices is to be expected. The degree of divergence can be attributed to deliberate policy choices and to practical considerations. An important factor is the level of taxation. The higher the effective tax rate, the greater the expense that could be justified. Table 11 suggests the interplays among property values, effective tax rates, taxes, and taxes at stake with a 10 percent valuation "error." Tax amounts are shown for two representative values (€100,000 and €200,000) and for three tax rates—a very low rate of 0.01 percent, a low rate of 0.1 percent, and a moderate rate of 1 percent. An "error rate" of 10 percent was chosen because discrepancies between estimated values and actual sales prices typically average about 10 percent in high-quality mass valuation systems. The annual

cost per property of operating such a system could be about €20. Scanning column 3 of Table 11 suggests that a high-quality valuation system would be completely uneconomic in a property tax system with effective tax rates on the order of 0.01 percent and becomes easily justifiable only when effective tax rates reach at least 1 percent—if typical property values are as high as those illustrated. Data such as is shown in column 4 illustrate that typical valuation or tax errors produced by an inferior system need to considerably higher than 10 percent before upgrading the system could be easily cost-justified.

Table 11: Interplay among Values, Tax Rates, Taxes, & Taxes at Stake with a 10% Error

Illustrative value	Effective tax rate (%)	Тах	Tax at stake with a 10% error
(1)	(2)	(3)	(4)
€100,000	0.01	€10	€1
200,000		20	2
100,000	0.1	100	10
200,000	0.1	200	20
100,000	1.0	1,000	100
200,000	1.0	2000	200

Whatever the level of taxation, the costs of valuation need to be kept to a small percentage of the revenues raised from the property tax (as discussed later). Although, the costs and effectiveness of valuation systems seems little studied, there are several strategies for economizing on valuation, as will be discussed.

#### **Valuation assumptions**

Property tax valuations typically incorporate several simplifying assumptions that are designed to simplify the valuation problem and reduce the data that must be maintained. In a tax based on capital market values, properties often are assumed to be owned on a "fee simple" basis. That is, the valuation is based on the totality of rights that may be privately possessed. Any actual divisions of property rights (such as leases, mortgages, and leases) are ignored in determining the value of land and buildings. On the other hand, rights normally reserved to government, such as the right to tax property, the right to control how property is used, and so on would be taken into account in the valuation. For example, in the Netherlands, property is assumed to be vacant and unencumbered by a mortgage or a long-term lease. Parallel considerations pertain to annual rental valuations.

In addition to an assumption regarding property rights, it is common to base the valuation on a specified property use. There are two main use concepts: (1) the current use and (2) the most economic, legally permitted use (so-called "highest and best" use). Current use and most economic use diverge when it can be safely assumed that a potential buyer would see a way to use a property more intensively or profitably than it is currently used. Actual market price tends reflect future, not current uses, unless the two are the same, which can be the case. Several countries have provisions in their laws that resemble a most economic use standard by requiring the tax administration to disregard under-use of land (particularly agricultural land). In Denmark and Sweden, most economic use is assumed. In United Kingdom, the standard is actual use (consequently vacant land and buildings receive lower assessments).

Furthermore, a uniform valuation date typically is specified. Ideally, this date would be the same as the date of assessment, but this can be impractical. When the valuation date is the same as the assessment date, the valuer may not have enough market evidence near the assessment date to estimate values on that date confidently. One approach is to ignore the issue and to extrapolate from available market value evidence. Another is to delay the tax due date (sometimes by as much as a year). A variant on this solution is to establish an "antecedent" valuation date (that is, a date six to twelve months earlier than the assessment date). Sweden and United Kingdom have valuation dates two years before the assessments come into force (which arguably is excessive in an era of computerassisted mass appraisal systems). In the case of Sweden, however, a ratio study using sales in the year before assessments come into force is used to test the accuracy of the values.<sup>2</sup>

#### Methods and procedures

affect Valuation practices can the acceptability of the property tax. Use of recent bona fide sales and rents and internationally accepted valuation methods increases the likelihood that valuations will be perceived as accurate. Although different terminology may be employed, there is widespread recognition of the three main valuation methods: (1) the sales comparison method, (2) the income capitalization method, and (3) the cost of construction method. See Gloudemans and Almy (2011) for a detailed discussion of modern mass valuation methods.

Another issue is whether valuations generally should be "conservative" (that is, should values generally be less than 100 percent of market prices?). For example, the Danish Central Customs and Tax Administration aims to produce values that are about 5 percent less than actual market prices on the valuation date. It is generally agreed that such a practice is acceptable, because when taxpayers believe that the real market values are a little higher than their assessments, they are less likely to appeal. (In Canada and the US, some provinces and states have rules that require valuations to be within plus or minus 10 percent of the actual value.)

Several countries rely on "valuation" methods that make virtually no use of current, direct market evidence. Some methods

are based on socialist-era notions of land desirability that virtually ignore prices and rely instead on such factors as population, urban infrastructure (streets, transportation, utilities, and so on), governmental and other services (schools, hospitals, shops, and so on), attractiveness of surroundings (the general quality of buildings), and environmental quality (biological, air, water).Such methods are difficult to maintain because they require a lot of data. Moreover, they lack a basis in economics (that is, the various indices to produce a price essentially is arbitrary)..

#### **Codification of valuation methods**

There are differences in the extent to which valuation methods and rules are entrenched in statutes or regulations. In Netherlands and the United Kingdom, the law merely establishes standards, and the assessor has considerable discretion regarding methods and the valuation models employed. In many other countries, however, the law governing valuation often requires that valuation models be formally adopted by the government and published in a regulation containing the necessary rates and coefficients. In this way, discretion is limited after the valuation model has been incorporated in the law. When valuation methods are highly codified, taxpayers enjoy greater certainty about what their property tax obligations will be. On the other hand, maintaining equity is more difficult unless the legislative framework facilitates frequent changes in the legislation or regulations governing valuation. The degree of codification of valuation methods also has implications for the appeal system and for supervision and control.

#### **Special valuation issues**

As previously noted, some types of property, such as those of utility and transportation systems, present special valuation and assessment problems. Such systems may span more than country or local property tax

<sup>2</sup> Ratio studies are discussed under performance measures, below.

district. When this happens, attempting to value the part of the system in each area would be artificial. The sum of the valuations of the property in each area mostly likely would bear little resemblance to an integrated valuation of the entire system. The best solution to this problem, then, is to attempt to value the entire system and then apportion to value to the various taxing districts. This approach is taken in Ireland and the United Kingdom in the valuation of utilities, and special "global" valuation methods are used.

Other types of highly specialized properties, such as industrial properties that are designed to the requirements of a single owner, also are difficult to value using ordinary valuation methods because of limited current market value evidence. One solution to this problem is to specify that the cost of construction be used. For example, in the Netherlands nonmarketable properties are to be valued on the basis of depreciated replacement costs.

Also as noted, some ordinary types of real property can be subject to special valuation rules. Common examples are agricultural and forest properties. These properties usually are valued on the assumption that they will continue to be used as they currently are. Furthermore, land is valued on its ability to produce crops, support livestock, or grow marketable timber. Consequently, soil type and other natural environmental factors are important in valuation. An issue in the valuation of forests, orchards, and the like is whether the growing trees should be valued (their value is not measured in Estonia).

#### Revaluation

The frequency with which valuations are updated and the methods used to update them are as important as the appraisal approaches used. In principle, revaluations should be frequent enough to maintain an acceptable degree of uniformity in effective tax rates. That is, valuations should be adjusted upward or downward to keep pace with market developments and changes in price levels (such as, inflation). Ideally, valuations would be updated annually if necessary, but this frequency is not common in Europe. More commonly, legislation specifies a revaluation schedule (as noted in Table 10). When properties are reappraised on a fixed cycle, one option is to revalue all districts at the same time in one large project. Another is to stagger the reappraisals (so-called "rolling revaluations").

Especially when the interval between reappraisals is long, indexing can maintain buoyancy. France and Germany follow this approach. If separate factors are developed for different property types and areas, overall valuation accuracy can be improved slightly, thereby increasing property tax equity. Indexing also can reduce shocks caused by reappraisals.

When the interval between revaluations is greater than a year, rules also are needed for valuing new properties and for revaluing properties that have undergone changes. There are two approaches to valuing properties after a general revaluation. One is to apply the existing valuation standards to new properties, which may not be problematic as long as there have not been fundamental changes in property markets. This approach is taken in the United Kingdom. The other approach is to value the property as of the date of the new appraisal.

#### **Assessment and Collection**

Along with defining the liability for taxes, property tax laws define administrative responsibilities for finalizing lists of taxable properties, providing notice of assessments and tax obligations, setting out payment procedures, collecting property taxes, and specifying the actions the tax administration may take to collect delinquent taxes (arrears). They cover such points as the number of installments (if any), payment deadlines, accounting for partial payments, penalties and interest when payments are late, and the consequences of failing to pay.

Effective collection is particularly challenging in countries that do not have a culture of paying taxes fully and voluntarily. Well-designed property tax systems attempt to make it easier and less expensive to pay property taxes than to avoid them. This section outlines the main elements and options of an effective property tax collection program.

#### Billing

Virtually all countries issue tax notices (or bills) annually, both as a courtesy to taxpayers and to cement the obligation. Individual bills have the beneficial psychological effect of formally informing taxpayers that they have an obligation to pay, provide a financial control, and, more important, make it possible to use more than one place to make payments.

Usually, bills are mailed. When the postal service is not reliable or when owners are unknown, delivery may be to the property. (Armenia was forced to send tax collectors into the field in the early years of its land tax.) In any event, failure of the tax administration to deliver the required notices or failure of taxpayers to receive them ordinarily does not invalidate tax obligations.

A feature of the property tax that contributes to its unpopularity is the visibility and size of many annual property tax bills. One way to reduce their apparent size is to allow installment and partial payments. For example, Armenia allows owners of residential property to make any number of partial payments as long as the amount due is paid in full by 1 December of the year after the tax year in question.

#### Collection

Increasingly, tax collectors are trying other ways to make collection more convenient.

Rather than requiring taxpayers to appear personally before the tax collector and to pay in cash, many systems allow taxes to be paid by check, direct debit, or credit card. In addition to making payments to the tax collector, taxpayers may be able to pay their property taxes along with mortgage and utility payments, or they may be able to pay at banks, at the post, or online. For example, in Albania, taxes may be paid in banks as well as in local government offices (which act as agents for the national government). In Czech Republic, banks may accept property tax payments in cash or check, and legal persons may make bank transfers. In the Slovak Republic, many payments are made at post offices. The new Greek property tax is paid through electric utilities.

Whether installments and partial payments are allowed may depend on the tax in question and on the amount of the property tax bill. To reduce administrative costs, installments may not be allowed when the total amount due is very small. When installment payments are at the taxpayer's option, the tax bill often contains coupons, one of which is to be submitted with each payment. Estonia takes this approach. Some countries (including Czech Republic) schedule nstallment due dates to coincide with harvest time, so that farmers will have the cash to pay the tax. Netherlands allows taxpayers to request extensions, which normally would be granted (although interest would be charged).

#### Enforcement

Some countries, such as the Netherlands, permits tax collectors to accelerate payment deadlines when there are grounds to believe that the taxpayer or the taxable property will leave the jurisdiction of the tax collector (the municipality in the case of the Netherlands).

Property tax laws usually provide a variety of measures designed to make avoiding paying property taxes expensive. Penalties and interest are often charged on late payments as an incentive to speed payment, and discounts sometimes are offered for early payments. To be effective, penalties and interest should be applied automatically. The rate of interest (or discount) should be higher than the market rate of interest. Countries charging interest, penalties, or both on overdue taxes include Armenia, Denmark, Lithuania, Netherlands, Poland, Romania, and Russia.

After a stipulated period of delinquency (generally ranging from one to three years), property tax administrations usually have recourse to direct enforcement actions that involve a legal process. Typically, a demand for prompt payment is issued. If that is ignored, enforcement begins. Enforcement mechanisms include removal and sale of goods, attachments of pay and bank accounts, and imprisonment. Other mechanisms include the creation of tax liens and confiscation of the real estate. Property tax liens usually have priority over other (private) liens.

Providing a quid pro quo can encourage payment of property taxes. Examples include making property taxes deductible from income taxes, not allowing a deed to be registered without proof of payment of property taxes (a tax clearance), and allowing mortgage interest to be deducted from income taxes only with proof of payment of property taxes.

### Administration of Appeals

The relationship between taxpayers and the tax administration differs between (a) self-assessed taxes, such as income and VAT typically are, and (b) administratively determined assessments, as is typical under recurrent taxes on immovable property. This difference has important implications for the design and operation of the appeal system.

Under income and consumption taxes, the role of the tax administration typically is to process taxpayers' returns and to evaluate the reasonableness of their assessments. Only when they override the taxpayer's self-assessment and the taxpayer disputes the new assessment is there a need to consider an appeal. In contrast, when an administrative agency makes the initial assessment, the likelihood of differences of opinion between the tax administration and the taxpayer is much greater. Hence, the need for an accessible and responsive appeal system is much greater. A major consideration in the administration of appeals is that the process operates as intended and that the interests of the appellant and the administration are properly balanced.

Appeals systems establish who may appeal a property tax assessment and the time, place, and manner of filing an appeal. They specify the allowable grounds for an appeal. Overvaluation is a common ground in a valuebased system. Some systems allow appeals on the basis of non-uniformity as well. Sophisticated legal systems specify standards of appeal (burdens of proof) and standards governing the admission of evidence. In Estonia, assessments may be appealed only on grounds that regulations were not followed or if the error is greater than 20 percent.

In value-based property taxes, the nature of the valuation system can affect the design of the appeal system. When generalized valuation models are entrenched in a valuation regulation, and assessments are determined by applying the rates and coefficients in the regulation to each taxable property, chaos would ensue if each taxpayer could subsequently challenge the regulation. Estonia addresses this issue by having a period for public comments about the valuation models before they are finalized in a regulation.

Particularly in England, a specialized industry of agents who represent taxpayers before appeal bodies has sprung up. Nominally to protect the interest of their clients, these agencies tend to lodge preemptive, "protective" appeals before the factual situation regarding the general tenor of assessments is fully understood. This clogs the appeal process and diverts resources from making better original assessments to processing appeals and defending assessments. In essence, the agents have "captured" the tax.

An appeal does not delay the date taxes are due in Denmark, Netherlands, Sweden, and Switzerland. It does in France.

### Resource Requirements, Performance Measures, and Achieving Cost-effectiveness

To achieve political (popular) acceptance, revenue targets, and other goals, property taxes need to be provided with sufficient human and technological resources and be well administered. Staffing requirements depend on such factors as the amount of work to be done, the time available, how work is organized, and available technology. Staff may be hired or work may be contracted out. Humans' abilities depend on their education, training, and experience. Adequate computer support boosts productivity.

#### Funding

Budgets express available resources in monetary terms. The resources provided for property tax administration are a reflection of the political support for accurate and equitable property tax assessments. Management practices affect how well available resources are used. Directly or indirectly, citizens hold tax administrators accountable for their performance.

The costs of administering a property tax are an important design consideration. Compliance costs as well administrative costs also should be considered.

A challenge that managers of property tax systems face everywhere is achieving costeffectiveness—that is, an acceptably high level of performance at an acceptably low level of administrative cost. One aspect of cost-effectiveness is administrative costs as a percentage of property tax revenues (others would be costs per some measure of property tax equity). The objective would be to minimize this ratio.

Comparing administrative costs is difficult (OECD, Forum on Tax Administration 2011). Factors that affect absolute costs and costs per unit of revenue include differences in the coverage of property tax bases, whether taxes are based on area or value, the frequency of revaluations, the extent of automation, and whether there are other uses of valuation and cadastral data. The cost per unit of revenue also depends, in part, on effective tax rates. Other things being equal, the higher the effective tax rate, the lower the administrative cost rate will be. Another difficulty in analyzing funding (and staffing) is that many governmental budgeting and accounting systems do not permit segregating property tax-related costs from all costs. It is important to recognize that start-up costs usually are considerably greater than annual operation costs after a system has been working for several years. For reasons such as these, few statistics on direct expenditures or relative costs are available in the literature.

Certainly the costs of administering a property tax, expressed as a percentage of revenues, should be less than 100 percent, otherwise the tax would cost more to administer than it produced in revenue. In western countries, administrative costs in the range of 2 to 5 percent of revenues often are achieved. In Netherlands in 2006, valuation costs equaled 3 percent of total property tax revenues (in the United States, which generally has higher effective property tax rates than is common in Europe, assessment and valuation costs generally are less than 2 percent of revenue). Property tax administrators also should consider the costs associated with taxing ordinary residential taxpayers relative to typical tax bills. When tax bills are the equivalent to the cost of a package of cigarettes or a few beers, it is almost impossible to administer the tax cost-effectively. As noted, some countries approach this problem by exempting properties under a certain value or area on the grounds of administrative efficiency.

As the costs of staff typically constitute the greatest proportion of administrative costs, efficient use of staff is very important. However, low levels of pay in the public service can distort the picture of administrative costs, because low levels of pay *and* competent administration cannot be sustained in the long run. The best staff likely will leave when better paying jobs can be found elsewhere. A permanently low level of pay is an invitation to corruption.

#### Staffing

Generally the members of the staff of a property tax administration are full-time civil servants. Sometimes part-time boards are used. The members of these boards may be appointed by the property tax administration, local governments, and—occasionally elected. In France, for example, elected members of local authorities help with data collection. Similarly, members of Swiss cantonal or communal valuation commissions may be elected.

The qualifications of valuers can be an important issue. International experience varies with respect to the importance of academic preparation, in-service training, and professional credentials. Also, the profession to which valuers belong also varies. Although valuation essentially is a form of economic analysis, in some countries valuers are architects, civil engineers, and surveyors. Within the field of valuation, there is growing recognition that the qualifications needed for mass appraisal are different from traditional forms of single property appraisal. Property tax valuers need skills in statistical analysis. As public servants, they need an appreciation of tax policy and public relations as well.

In Austria, valuers receive extensive in-service training. In Denmark, valuation model builders usually are economists. In Estonia, valuers generally are graduate surveyors. Lithuania has developed qualifications and testing standards for property valuers. They include a relevant university degree, relevant experience, and passing a qualification test. Valuers may specialize in real property, movable property, or business valuation. In 1999, a multilevel certification system was introduced. Netherlands, valuers for property tax purposes traditionally have belonged to Netherlands Association of Housing Agents and had its NFM qualification. Beginning in 1998, they were required to pass the examination for Immovable Property Assessment Valuers. Valuers are architects in Spain. Switzerland has no specific legal qualifications for valuation commissioners, but many come from the building trades and receive training from the Land Registry Office. In the United Kingdom, there are no legal requirements concerning rating valuers. Valuers generally are specialized surveyors who have obtained a qualification from a recognized professional body, such as the Institute for Rating, Revenues, and Valuation (IRRV) and the Royal Institution of Chartered Surveyors (RICS). Many are university graduates.

#### Technology

CAMA (computerized registers), mapping, imagery

The use of computers to store property tax records and assist with administrative processes including valuation is almost essential. Computers increase analytical capabilities, perform routine calculations, and produce reports. They facilitate access to data and increase data security, especially from disasters like fire. Advanced computer-assisted mass appraisal (CAMA) systems facilitate market research; support all three approaches to value; identify comparable properties, including comparable sales, and assist with quality assurance. The best are integrated with tax administration and geographic information systems (GIS).

As Table 10 suggests, widespread progress is being made in Europe in computerizing cadastral records, integrating them with GISs, and developing computer-assisted property tax systems, including CAMA systems (Federal Land Cadastral Service of Russia 2001). Countries that led in the development of computerized cadastral systems include Denmark (where property tax systems are fully computerized and digital maps have been developed), Netherlands, and Sweden (where land, building, and sales registers are computerized and where digital maps are being developed). The United Kingdom first made widespread use of computers in the 1995 revaluation of non-domestic property, and tax billing, collection, and accounting by local authorities are commonly computerized. Subsequently, Iceland, Lithuania, Latvia, Northern Ireland. and Slovenia have developed computerized cadastres, and all up Slovenia have carried out computersupported revaluations. Developed western countries that appear to lag in computerizing property registers and valuation systems include Switzerland (although digital cadastral maps are under development there), Estonia, France, Germany, and Spain.

PROPERTY TAX REGIMES

# CHAPTER 10 CONCLUSIONS AND RECOMMENDATIONS FOR IMPROVING PROPERTY TAX REGIMES

Europe's property tax regimes offer many examples of wise policy and good administration. There also are examples of dubious policy and poor administration. Circumstances vary too much, however, to attempt to assign regimes to quality classes or to rank them.

### **Reform Strategies**

The literature on property taxation offers much good advice on well-designed and administered property tax regimes. For example, Bahl 2009, p. iv, lays out an eleven point strategy for improving a property tax regime that reflects much accumulated wisdom (see, for example, Bahl, Martinez-Vazquez, and Youngman; Bird and Slack, Dale, and others). Four of his points merit singling out here, as they touch on recommendations that I would make.

Bahl's first recommendation is to "do a thorough diagnostic of the existing system of property taxation." Along with consideration of policy and practice matters, such a diagnostic should include the quantitative analyses discussed below.

Bahl's second recommendation is that government reform packages should adopt a "policy first" stance. He says that "Unless the tax structure is simple enough to be efficiently administered, and fair enough to gain the confidence of the population, administrative reform by itself will not succeed."

Sixth, he recognizes that best practice shows that all four steps in property tax administration (identification of properties, valuation, recordkeeping, and collection) should be part of any administrative reform program. To leave out even one of the basic pillars of administration may jeopardize the success of a property tax reform, whether in terms of revenue mobilization or any other objectives the reform was designed to achieve.

Finally, Bahl recommends that the local (or central) government should establish a monitoring activity that will help with tracking the success of a reformed property tax. In Europe, Netherlands perhaps does best at monitoring performance.

### **Performance Analysis**

Although practices vary, most regimes could benefit from greater performance analysis, as Bhal's eleventh strategy suggests. At least based on the literature in English, comparatively few countries do much more than report basic revenue statistics.

At the policy level, there is a need for greater information on such things as the composition of the property tax base and how the composition changes over time. That is, how much property tax is paid by each type of property relative to its share of total value? This addresses the interplay of such factors as differential tax rates, differing bases of assessments, and differing exemption amounts. Regarding exemptions, it is useful to estimate the revenues foregone from each (sometimes known as "tax expenditures").

At an administrative level, there is a need for information on workloads and productivity rates so that resource requirements can be better evaluated. Attempts should be made to measure the costs and benefits of program outcomes.

An important gauge of the performance of a property tax system is collection efficiency. Two measures are of interest: the percentage of property taxes assessed that are collected in the year that they first come due and the percentage of accumulated obligations that are eventually paid (along with penalties and interest). Little information is available on collection efficiency in many countries.1 Property tax collections in Albania in 1994 and 1995 were only 15 percent and 25 percent of expected collections due to taxpayer resistance and the poor state of the economy. In Armenia, about 55 percent of agricultural land taxes are collected by the deadline, and enforcement measures generate another 15 percent. Countries with high collection efficiency (close to 100 percent) include Denmark, Estonia (in 1993, the collection ratio was only 70 percent), Netherlands, Sweden, and the United Kingdom.

In a valued-based property tax, valuation accuracy is-or should be-an important concern. The chief tool used to gauge valuation accuracy in mass appraisal for property tax purposes is a "ratio study" (Gloudemans and Almy, 2011). Such a study is an investigation of how closely the valuations that property taxes are based on compare to market values (either current market values or the values on the valuation date). Actual prices from transactions deemed to be open-market, arm'slength sales are used as evidence of market values, and the "ratio" in a ratio study simply is the ratio of the valuation to the sale price. If a property worth €200,000 is valued for tax purposes at €150,000, the ratio is 0.75 (that is, 150,000/200,000). In a ratio study, sales ratios would be calculated for all the sales that were deemed usable and patterns in the ratios would be examined. The statistics calculated

in ratio studies mainly deal with the level of value and the uniformity of values.<sup>2</sup> Level of value is measured by a measure of central tendency, such as the median, the common arithmetic mean, and the weighted mean. There are several aspects to uniformity. If the question is whether two or more groups of property are valued uniformly, measures of central tendency are compared. If the question is whether all the properties in a group are valued uniformly, a measure of variability is calculated. The coefficient of dispersion is the chief measure used. Sometimes, the concern is whether high-value properties and low-value properties are valued uniformly, other tests are used here. (The same concepts can be applied in studies of annual rental value assessments.) Denmark, Iceland, Lithuania, Northern Ireland, and Sweden are among the countries that routinely evaluate valuation performance using ratio studies.

Although ratio studies focus on valuation, they also provide information on levels and patterns in effective property tax rates. If the tax on the property valued at  $\in$ 150,000 in the above example is nominally taxed at 1 percent, its effective tax rate is 0.75 percent. When there are sufficient sales to do the analysis, ratio studies can be used to evaluate the level and uniformity of effective property tax rates in an area-based property tax. Such an analysis could inform debates about whether to introduce a value-based property tax.

### Obstacles to Frequent Revaluations

In value-based property tax regimes, there no longer is a technical or administrative justification for not revaluing properties regularly. The ability to update values as frequently as annually requires: (1) continuous market monitoring, (2) studies of valuation

OECD, Forum on Tax Administration, reports data for tax systems as a whole.

Another area of statistical inquiry is whether the primary ratio study statistics can be considered reliable, but that is outside the scope of this survey.

accuracy (ratio studies) and price trends, and (3) continuous maintenance of the land and building attribute database. Only the last element has any significant resource implications. When taxpayers are enlisted in the effort as in Denmark and Sweden or when oblique aerial photography is used, the resources required in maintaining property attribute data become quite modest.

As previously noted, revaluations usually are made on a specified cycle, with intervals greater than six years considered too great. Even when values are updated annually, it should be underscored that every value need be changed every year. Values need only to be changed when there is a clear indication based on market evidence that existing valuations no longer meet standards. Different strategies can be used for different segments of the property market.

Changing from intermittent revaluation projects to an annual reassessment program can offer major benefits. The most important is that property tax burdens are more equitably distributed. Changes in the composition of the tax base are more gradual, which reduces popular and political opposition to revaluations. Property owners can more easily predict what their property taxes will be, and taxing districts can better judge their property tax capacity. Lastly, the annual costs of an ongoing revaluation program often compare favorably with the annualized costs of periodic revaluations.

To argue for frequent revaluations is not to argue that all recurrent taxes on immovable property should be value-based. As previously noted, there are situations in which areabased property taxes are appropriate, and a well-administered area-base tax likely is more acceptable than a badly neglected value-based property tax. PROPERTY TAX REGIMES

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PROPERTY TAX REGIMES

## APPENDICES

IMF and OECD Systems for Classifying Taxes

The International Monetary Fund (IMF) and the Organization for Economic Cooperation and Development (OECD) have developed largely complementary schemes for classifying taxes, which they use in presenting property tax statistics. Taxes related to land and buildings include:

Tax Category	Classification Code	
	IMF	OECD
Taxes on property	113	4000
Recurrent taxes on immovable property	1131	4100
Recurrent taxes on net wealth	1132	4200
Estate, inheritance, and gift taxes	1133	4300
Taxes on financial and capital transfers (including notary fees, stamp duty, and transfer taxes)	1134	4400
Other non-recurrent taxes on property	1135	
Other recurrent taxes on property	1136	
Capital gains taxes	Included in 111	1120 and 1220
Income tax on imputed rental income of owner- occupied homes		Part of 1110

This report focuses on taxes classified as 1131. In the IMF's statistical compilations, recurrent property taxes are separately identified when they are national taxes.

Supplementary Country References

The table below identifies important references that update information in Yuan, Connolly, and Bell (2009) (YCB), European Union, Directorate-general Taxation and Customs Union (2002) (EU), Brown and Hepworth (2001) (BW), or Almy (2001). Column 2 identifies the most recent and best sources of information found on the property tax systems in the country in question. Column 3 indicates whether the country is included in Land (Real Estate) Mass Valuation Systems for Taxation Purposes in Europe (Federal Land Cadastre Service 2001). Column 4 indicates whether the country is included in Inventory of Land Administration Systems in Europe and North America, 4th edition (Manthorpe 2005). Some of the references shown in column 1, in turn, provide additional references.

Country	Sources (see references)	Mass Valuation System Survey	Land Administration System Survey
(1)	(2)	(3)	(4)
Albania	YCB, BW, and Almy 2001		Yes
Armenia	Yeghoyan, BW, Almy 2001	Yes	Yes
Austria	EU, BW, McCluskey, and Almy 2001	Yes	Yes
Belarus	YCB, BW, and Almy 2001	In development	Yes
Belgium	Belgium Federal Public Service Finance (2011), EU, BW, Almy 2001	Yes	
Bosnia-Herzegovina	Jokay (2001),	No	Yes
Bulgaria	YCB, BW, and Almy 2001		Yes
Croatia	YCB, BW, and Almy 2001		Yes
Cyprus	Cyprus Inland Revenue Department, BW	Yes	Yes
Czech Republic	YCB, BW, and Almy 2001		Yes
Denmark	BW, and Almy 2001	Yes	Yes
Estonia	BW, and Almy 2001	Yes	Yes
Finland	Kokkonen, EU, BW, and Almy 2001	Yes	Yes
France	France Public Finances General Directorate 2011, EU, BW, and Almy 2001	Yes	Yes
Georgia	YCB and Almy 2001	Yes	Yes
Germany	Hoffmann 2006, Spahn 2003, EU, BW, and Almy 2001	Yes	Yes
Greece	Lafakis, 2011, BW, and Almy 2001		Yes
Hungary	YCB, BW, and Almy 2001	No	Yes
Iceland	Ingvarsson et al. 2009 and BW	Yes	Yes
Ireland	Ireland Commission on Taxation 2009, BW, and Almy 2001		Yes
Italy	EU, BW, and Almy 2001	Yes	Yes
Kazakhstan			
Kosovo?			
Latvia	BW, and Almy 2001	Yes	Yes
Lithuania	YCB and Almy 2001	Yes	Yes
Luxembourg	EU and BW		Yes
Macedonia	Janevska 2006 and BW		Yes
Malta	BW	No	Yes
Moldova	Veaceslav and Carolina, YCB, BW, and Almy 2001		Yes
Montenegro	Vusurovic 2006		
Netherlands	Gieskes et al. 2002, EU, BW, and Almy 2001	Yes	Yes
Norway	BW and Almy 2001	No	Yes
Poland	YCB, BW and Almy 2001		Yes
Portugal	EU, BW, and Almy 2001		Yes
Romania	YCB, BW and Almy 2001	Yes	Yes
Russia	BW and Almy 2001	Yes	Yes

Country	Sources (see references)	Mass Valuation System Survey	Land Administration System Survey
San Marino			Yes
Serbia	IPTI Kaleidoscope, Spring 2001		Yes
Slovakia	YCB, BW, and Almy 2001	Yes	Yes
Slovenia	YCB, BW, and Almy 2001	In development	Yes
Spain	EU, BW, and Almy 2001	Yes	Yes
Sweden	Swedish Tax Agency 2011, EU, Almy 2001	Yes	Yes
Switzerland	McCluskey and BW	Yes	Yes
Turkey	BW, and Almy 2001		Yes
Ukraine	УСВ		
United Kingdom	EU, BW, and Almy 2001	Yes	Yes

PROPERTY TAX REGIMES

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