



INNOVATIVE LAND and PROPERTY TAXATION



Innovative Land and Property Taxation

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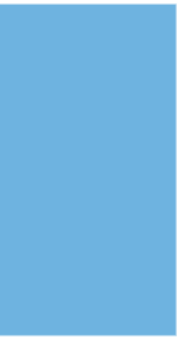
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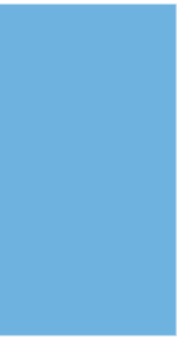
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ABBREVIATIONS

ARV	Annual Rental Value
AMC	Ahmedabad Municipal Corporation
BID	Business improvement district
BBMP	Bruhat Bangalore Mahanagar Palike
CEE	Central and Eastern Europe
CVS	Capital valuations system
DAG	Development Action Group
ECE	Economic Commission for Europe
GIS	Geographic Information System
GLTN	Global Land Tool Network
GTZ	German Technical Cooperation
JDM	Joint development mechanisms
LPT	Land and property taxation
LRT	Light rail transit
LVC	Land value capture
LVT	Land value taxation
MDG	Millennium Development Goal
MOLA	Meeting of Officials on Land Administration
TIF	Tax increment finance
WPLA	Working Party on Land Administration
UAM	Unit Area-based Method
ULB	Urban Local Bodies



FOREWORD



In this publication we learn that land is at the core of the urban wealth creation. We learn that land and property taxation is an effective means for the positive transformation of a city in the quest to build wealth, create jobs and tackle development problems.

We all know that land and property values in many urban areas are growing. The need to be in the best location and the limits on urban land supply underpin urban development. We also know that the conversion of rural land to urban land increases land value.

However, it tells us too that the gains made from the conversion of rural land to urban, are not always equitably shared. Neither do they necessarily benefit the city as a whole. Legislative frameworks can play an important role in ensuring that there is equitable access to both land and the proceeds from its increased value.

With the cost of urban land and property becoming less and less affordable to many people, this work therefore provides a useful guide how taxation revenues, and rising land and property prices can be used for urban development and the wellbeing of a city's inhabitants.

It shows how successful city development can use a reliable source of funding to sustain investment in infrastructure and services. Local and national governments can effectively use land and property taxation as an effective means to redistribute wealth, create a better city, and invest in infrastructure and services ultimately of benefit to all.

The innovative approaches to land and property taxation policies, reforms and instruments outlined here shows how this can be done. The many case studies here provide examples of policies, legal frameworks, tools and illustrative cases from around the world.

This publication is part of a series on land and property tax which aims to share lessons and good practices.

At UN-Habitat we are committed to supporting local and national governments in their quest to improve their land and property taxation systems. It is my hope that the many examples presented here will provide helpful guidance and inspiration.

Dr. Joan Clos,

A handwritten signature in black ink that reads "Joan Clos". The signature is fluid and cursive, with a long horizontal stroke at the end.

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

The first part of the document discusses the importance of maintaining accurate records in a business setting. It highlights how proper record-keeping can help in decision-making, legal compliance, and financial management. The text emphasizes that records should be organized, up-to-date, and easily accessible to all relevant personnel.

Next, the document addresses the challenges of data management in the digital age. With the increasing volume of data generated by various sources, businesses face the task of storing, securing, and analyzing this information effectively. The text suggests implementing robust data management systems and protocols to ensure data integrity and security.

The third section focuses on the role of technology in streamlining business operations. It explores how automation and digital tools can reduce manual tasks, improve efficiency, and enhance communication within an organization. The text encourages businesses to invest in technology that aligns with their specific needs and goals.

Finally, the document discusses the importance of continuous learning and professional development. In a rapidly changing business environment, employees must stay updated with the latest industry trends and skills. The text recommends providing training opportunities and encouraging a culture of lifelong learning to ensure the organization remains competitive and innovative.

Section 1

POLICIES, LEGAL and INSTITUTIONAL FRAMEWORKS

01 LAND-BASED TAXATION AND URBAN DEVELOPMENT

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1.1 TAXATION AND SUSTAINABLE URBAN DEVELOPMENT

Taxation is as old as public administration. Public administration has always employed taxation as a major source of revenue. Public administration, in its rudimentary form employed in-kind taxes (e.g., grain, cattle) and often copied religious practices to determine rates (e.g., tithe). The advent of civilization and sophistication of public administration changed not only the way taxes have been levied (in-kind payment gave way to levies in gold or paper money), but also enormously increased the type and nature of human endeavors that have been subjected to taxation.

For centuries, therefore, governments at various levels have assessed and levied actual or perceived incomes arising from labor (employment), capital, land or property. This has given rise to various forms of taxation: personal income tax, sales and profit tax, excise tax, transfer and / or capital gains tax, inheritance tax, land and property tax.

The benefits of collecting taxes are evident and enormous. However, paying taxes has always been and will probably remain contentious

and unpopular. When it comes to urban development, taxation is an important conduit to generate revenue and also a tool to redistribute wealth. The objectives of taxation are many, including alleviating poverty and sharing societal benefits with low-income and disadvantaged groups.

For example, taxation revenue can be used to subsidize infrastructure, services, affordable housing, land provision, economic growth, and promote investment in slums and low income neighborhoods. Taxes are only effective if there is the ability to raise revenue and use efficiently on the desired level of service and infrastructure provision to achieve urban development goals.

Clearly, “Taxation should not be seen only as a source of revenue for the community but also as a powerful tool to encourage development of desirable locations, to exercise a controlling effect on the land market and to redistribute to the public at large the benefits of the unearned increase in land values.”¹

¹ The Vancouver Action Plan for human settlements contains 64 Recommendations for National Action. It was approved at the United Nations Conference on Human Settlements (first Habitat Conference), in Vancouver, Canada, in June 1976.

Taxation can act as a tool to manage land use, urban density and expansion, speculations and transactions. Taxation is often used as an urban management tool and a resource mobilization mechanism. For instance, how land-based taxation is used has a significant bearing on urban structure and patterns. This is so because taxation can influence the quantity of urban land used, speculations, transactions (e.g. real estate) and land market.

Land and property taxation² is the practice of creating and using national and/or local revenues from land and improvements over land. Land and property taxation is a key to managing local and central governments affairs. The way in which land-based taxation is used can stimulate land market development, particularly land market transactions.³

For urban land markets to prosper through taxation, national and/or local governments should ensure for instance that transparency in land administration and information is in place.⁴ Above all, trusted policies, legislation and institutions have to be in place to provide a framework within which stakeholders can engage in undertaking taxation tasks.

Urban expansion, population growth, economic development and investments in infrastructure and services are factors that contribute to an increased demand for urban land. It is argued that national and mainly local governments should put in place mechanisms to tax land and property to 'recoup' land revenue so as to sustain urban development.⁵ This is particularly important in the context of rapid urbanization and changing land use such as conversion of rural land to urban land.

Some of the areas where land and property taxation often face challenges include tax burden, compliance (evasion) and enforcement. Demonstrating how land-based taxation is used at local level is often a good incentive to address such challenges. Embarking on land and property taxation requires that governments (local and national) work on improving and addressing collection efficiency.⁶

For example, it is important that governments limit exemptions to the payment of land and property taxes. Similarly, the tax rolls should be complete and kept up-to-date to provide confidence and adequate taxation collection and redistribution. A taxation system should strive to ensure that the cost of collecting and managing taxes is lower than the revenue collected and re-invested.

The purpose for land-based taxation (how it can and should be used for) is often contentious within government departments (both local and central). For instance, the department in charge of finances may regard land-based revenue for general purpose expenditure (e.g. paying salaries) while departments in charge of urban affairs, infrastructure and housing, may consider taxation as a means to improve urban services and infrastructure. Therefore, the control of land-based taxation is prone to institutional competition, not only amongst various tiers of government (local, sub-national and national), but also amongst various departments of a government. Clarifying roles and responsibilities in taxation procedures is also critical to better utilise tax revenue and enhance compliance among tax payers.

² In this publication, the term land and property taxation is used broadly to cover land and property-related taxes, rates, levies and fees.

³ UN-Habitat, GLTN, *Urban Land Mark (2010), Urban Land Markets: Economic concepts and tools for engaging in Africa.*

⁴ UN-Habitat (2010) *Transparency in land administration, Nairobi, Kenya.*

⁵ Agence Française de Développement (2009) *Who pays what for urban transport: handbook of good practices, Codatu.*

⁶ Collection efficiency means that the expenses for collecting land and property taxes exceed the cost of collecting and managing the taxes.

1.2 LAND AND PROPERTY TAXATION: WHAT IS IT ALL ABOUT?

Traditional land and property taxation – commonly referred to as property taxation – is based on the “combined assessed value of land, buildings and improvements thereon.”⁷ This is the most widely used form of taxation and this is what they mean when a typical mayor and public finance official talk about land and property tax. But, this is not the only form of taxation associated with land. For example, various jurisdictions have over the years attempted to restrict taxes to ownership of land and put forward various justifications for doing so. When taxation is restricted to land or higher tax rates are imposed on land rather than buildings or improvements, then taxation takes the form of land value taxation (also called site value rating).

Land value taxation (LVT), also known as recurrent property taxation, is often considered fair and progressive. As such, LVT claims to enhance efficiency of the use of land-based taxation in general and may discourage land and real estate speculation. The land value taxation in its pure form intends to let the landowners bear the full cost of the taxation with limited possibility to shift the cost to users (renters). In principle, land value approach does not enforce density and the timing for developing a parcel of land. Land value taxation advocates often argue for a single local land tax, at the expense of other factors of production (e.g. capital and labor). In so doing, land value taxation supports the abolition or reduction of taxation revenues (fees, rates, charges) from income, development, sales, various municipal services, building values, corporate profit etc. Further, LVT tends to decrease the dependency of local government on ‘central’ government revenue.

⁷ Owen Connellan (2004) *Land Value Taxation in Britain: Experience and Opportunities*, LILP, Cambridge, Massachusetts.

Despite these arguments, land value capture and taxation has limited uptake and traction due to various challenges including legal and administrative issues⁸ (reforms needed to abolish other prevailing taxation systems and finding the appropriate institutional arrangements from local to central government role in land-based taxation), assessment methods (how to design and implement a fair valuation method and rolls - by area/site, income, value increment, etc.- and its increments). Another variant of LVT argues for a modified land value taxation that supports a split-rate taxation system whereby the tax receipts separate the value or tax rate of land from the improvements on land. However, pure single land tax does not exist and “in those jurisdictions where land value taxation has been tried, it has typically taken the form of a two-rate tax, not a pure land value tax.”⁹ In practice, many countries have adopted some forms of LVT along with property and other taxation and revenue sources (income, sale, increment, improvement, etc.).

Property taxation is broadly concerned with raising revenue on structures and improvements over land. Taxing improvements (e.g. using betterment levies) often raises ethical questions, particularly its fairness and regressiveness. Unlike land value taxation, land and property based taxation are often a mixture of revenue streams and collection methods from local to national levels. Property taxation often considers both land and improvements. In fact, many countries apply a one-rate property tax system that takes into account both the land component and the improvements value.

Taxation may have an indirect, but significant effect on urban spatial planning in that it impacts on the amount of land released for

⁸ In United States for instance, some local governments have earmarked land and property taxation/revenue to school funding, road building and water services.

⁹ Dye, R.F and England, R.W (2010) *Assessing the theory and practice of land value taxation*, Policy Focus Report of for the Lincoln Institute of Land Policy, p.12.

urban development thus contributing to transactions of land parcels. For example, to achieve city density and mix, manage urban sprawl, overall distances of daily commutes and control of urban sprawl. Two main types of land and property taxation (including taxing the improvements on land) regimes are predominant in urban areas: annual land rent and an annual building tax. Land rent is paid by both permit holders and leaseholders and is in addition to the payments due under the lease agreements. Land rents paid to government for land held under leases should reflect a valuation based on location and accessibility.

1.3 WHAT DOES IT TAKE TO MAKE LAND AND PROPERTY TAXATION EFFECTIVE?

Land and property taxation has taken a centre stage in many countries with the view to improve and diversify revenue sources. In the “United States, for example, local governments raised nearly 72 percent of their tax receipts via property taxation in fiscal year 2006. In Australia and New Zealand, the comparable shares of the property tax in local tax revenues are 100 and 56 percent, respectively.”¹⁰

Various innovative approaches to land and property taxation policies, reforms and instruments have been used for a range of purposes including revenue generation for financing urban infrastructure and development, supporting decentralization, ensuring affordable housing, maintaining urban infrastructure and investments. These innovations in land and property taxation should be documented for knowledge sharing, with the view to improve urban land and property management.

The identification, recording and registration of land rights are essential to provide sound

management incentives. Considering that rights come with responsibilities and obligations, there is therefore a clear social interest to have land and land-based taxation used in a way that allows cost-effective provision of public goods. Land and property taxation can help support decentralization in a way that encourages service delivery, effective land use, especially in contexts where local governments need sustainable sources of revenue.

One of the main lessons from the recent economic, credit and housing crises is that tax bases have to be expanded to cushion future financial shocks. Land and property taxation becomes therefore a very attractive option for countries with economies in transition, developing countries and countries interested in widening their tax base.

Better understanding is needed of what policies, regulatory and legal frameworks, tools and instruments have been applied, where and with what outcomes. Over the decades, many countries have experimented with a range of land and property taxation policies, tools and instruments with notable successes, challenges and failures. This publication aims to share and disseminate such knowledge and experiences on the range of land and property taxation options to make better informed decisions. The publication explores a range of land and property taxation (LPT) issues. For example, readers will identify the conditions under which a LPT performs better. Areas considered and discussed in the following chapters include the context of institutional arrangements that clarify roles and responsibilities; the implementation of transparent procedures for decision-making; the existence of information technology and systems for collecting, processing, archiving and dissemination of land, property and valuation information; procedures, services and information which are accessible, affordable and user-friendly.

¹⁰ Dye, R.F and England, R.W (2010) *Assessing the theory and practice of land value taxation, Policy Focus Report for the Lincoln Institute of Land Policy*, p.4.

Of paramount importance is the role LPT can play to support, safeguard and achieve good functioning institutions, decentralization and governance. In this volume, many contributors argue that properly designed, managed and implemented, taxes on land and property can be a good instrument to sustain local and central government revenues.

They also demonstrate how well-functioning decentralization and governance structures are essential to enable land-based systems to work to their full potential. Absence of such solid bases often encourages speculators and rent-seeking behavior. Land taxation will be made more attractive if local governments are allowed to retain most of the property tax revenue they collect, if they are provided with the technical means (e.g. land registries and records) to do so, and if clear principles for valuation and regular updating of rolls to avoid arbitrariness are established. While none of these measures pose serious technical challenges, they may be resisted by those who would be required to pay significant amounts of taxes.

Improving transparency in land valuation will require clear principles which are applied uniformly, and property data that are regularly updated and publicly accessible.

1.4 WHY THIS PUBLICATION ON LAND AND PROPERTY TAXATION?

Papers presented in this volume have been initially produced for the International Conference on Land and Property Taxation.¹¹ The Conference was held in Warsaw, Poland, 15-16 October 2009, under the theme: Financing Affordable Housing in Cities: Towards Innovative Land and Property Taxation systems. The Conference aimed at enhancing and sharing knowledge and international experiences as well as

¹¹ The Conference was jointly organised by the Warsaw Office of the United Nations Human Settlements Programme (UN-Habitat), the Global Land Tool Network (GLTN) and the Ministry of Infrastructure of the Republic of Poland.

disseminating lessons learnt on policies and instruments for social equity, affordable housing and land and property taxation. Over sixty participants from ten countries and representing many stakeholders in the field of LPT attended the event. Seventeen papers were presented, exploring a range of policies, legislation and instruments (from various parts of the world) for improving equitable, affordable and sustainable land and property taxation, charges and fees. Out of the seventeen papers submitted and presented in Warsaw, eleven papers were further reviewed and included in these proceedings.

These proceedings are divided into three main Sections. Section 1 covers broad taxation policies, legal and institutional frameworks. The four papers in this section address the taxation and informal settlements discourse, the legislation on capturing increment of land value, the framework needed to use land value taxation to invest in public transport, and the specific ethical issues land value taxation brings in the land taxation debate. In this section, effort is made to illustrate and contrast these taxation frameworks, principles and issues with concrete country examples from Brazil, Poland, United Kingdom, USA, Australia and New Zealand.

Section 2 combines four contributions of notable land and property taxation experiences and practices in different countries. The first paper presents the outcomes of the survey of the state-of-the-art and use of land administration in United Nations Economic Commission for Europe (UNECE) countries with particular reference to the role of an up-to-date information system on land valuation and taxation. The second contribution demonstrates how land and property taxation has been successfully implemented in Montenegro of the former Yugoslavia (now an independent country) with interesting outcomes on local revenue. Using examples from two Indian cities (Bangalore and

Ahmedabad), the third paper on 'Innovations in property taxation systems in India' discusses specific areas where taxation reform is needed to steer urban development, particularly the provision of housing and urban infrastructure and services. The paper argues how adequate reforms at local and national governments are necessary for effective policies, strategies and tools to capitalise on a range of land and property taxation mechanisms. The last paper in this Section discusses how land value taxation contributes to sustainable urban development in the United Kingdom. The paper builds an argument that could see taxation shifted towards land instead of labor and capital with the aim to trigger an efficient, more effective and more equitable urban environment.

Section 3 presents three selected papers that highlight some useful land and property taxation and valuation tools. The emphasis is towards demonstrating how the tools have been implemented in various settings. The first paper in the series analyses the land and property taxation in South Africa and its implications on land use, infrastructure development and urban development. The paper also explores how land value taxation tools can be used to instill a more equitable

urban and infrastructure development in South African cities. The second paper presents how the public-value capturing tool has been used to leverage urban and infrastructure development in England, Spain (Valencia region) and the Netherlands with different and interesting outcomes. The third paper proposes a Space Syntax method as an approach to untangle the contentious issues of assessing land value. The tool is applied in the city of Wroclaw, Poland, to determine land price, essential for land valuation and property market.

The final chapter on concluding remarks draws key lessons learnt in regards to land and property taxation for urban development. Selected global recommendations are made to take the work forward. This chapter also presents the work and of UN-Habitat (past, current, ongoing and up-coming) in the area of land and property taxation. Possible strategies for a way forward in the broader field of land-based financing are also presented.

These proceedings also have an annex that provides a summary of three presentations made during the Conference on land and property taxation in Warsaw, October 2009.

02 PROPERTY TAX AND INFORMAL PROPERTY

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Abstract

This chapter explores the potential role for the property tax in addressing the often overlooked challenges posed by informality in developing countries. The results of the analysis undertaken are contrary to common assumptions over informality issues. In particular, the assumptions examined cover the following propositions: (i) informality has not and should not have any bearing on the property tax; (ii) the presence of informality is responsible in part for poorer property tax performance; and (iii) property tax exemptions should be an ingredient in policies to mitigate informality. Taking the example of Brazil, the presence of informality is in fact associated with improved property tax performance. Suggested explanations for this phenomenon include the fact that informality in third world cities is related to more dynamic local economies and to jurisdictions with more comprehensive regulatory frameworks. Finally, the study explores how a more vigorous property tax could be instrumental in preventing the vicious cycle of informality.

Keywords: *Property tax, informal property, third world fiscal systems.*

2.1 INTRODUCTION

Rampant informality, so emblematic of large cities in the developing world, poses many challenges for property taxation.¹ At first glance, taxation of informal settlements violates many of the premises on which property tax systems are based. Tenure rights are obscure or even of unknown origin. Building often takes place progressively and housing units may never be entirely finished. In addition, a property's value depends on vague or intangible factors such as the security provided by the community organizations. Occupants, or even the legal owner, may be too poor to pay for their own survival. As a result, no ability-to-pay is identified. The administrative costs of tax collection, as well as assessment costs, in informal areas exceed those in formal areas. Finally, public investments in informal settlements are unlikely in most cases.

In essence, this is the conventional wisdom about informal settlements and the reasons why public authorities in general, and fiscal administrators in particular, ignore these areas for taxation purposes. These attitudes are, however, heavily charged with misconceptions and prejudices. This has created a vicious cycle wherein informal settlements fail to gain public attention because they do not contribute to public revenues, and they remain informal and off the tax rolls because of public officials' neglect.

This chapter examines some of these common biases and their consequences for property tax collection. As argued here, collecting property taxes from residents of informal settlements may not only be possible under certain circumstances and within well-defined limits, but it may also be desirable as an ingredient in a more effective urban policy to mitigate informality.

¹ Informality refers in general to activities outside the formal rules or procedures determined from time to time by the government (Payne, 1997, 56).

This study is necessarily exploratory in nature because of the limited data available to analyze the interrelations between the property tax and informality. Indeed, this topic is largely absent in the academic literature and in public debates on either housing policy or taxation issues. The analysis looks at informal occupations in general, using the specific case of Latin American cities as illustration. In most instances, the arguments thus point to promising directions for further analysis rather than to conclusive findings.

This chapter is divided into five parts. Part 2.2 explains the phenomenon of informal land occupations and presents the myths that surround these areas and the people who live in them. Part 2.3 analyzes the impact of informality on the collection of property taxes, and explores some of the implications for establishing and administering property tax policy. Part 2.4 examines the potential of the property tax to break the vicious cycle of informality. The discussion addresses the theoretical and practical impacts of the property tax on land use and occupation, and outlines alternative tax treatments that authorities might consider. Part 2.5 takes a longer, and perhaps more critical, view of the challenges involved in implementing more effective property tax policies in informal settlements. The final remarks summarise the major findings and suggest directions for further research.

2.2 THE PHENOMENON OF INFORMAL LAND OCCUPATIONS

The first image of informality that usually comes to mind is one of slums.² However, there are several social and/or physical forms of informality, ranging from pirate subdivisions (usually characterised by market sales of land having no clear title) to areas where land is

² The term "slum" refers generically to settlements that originate from a process of informal occupation of land, often through invasions (Duhau, 2003).

not used according to urban standards and regulations. Although the terms “informal,” “illegal,” “irregular,” and “clandestine” occupations are often used interchangeably, they refer to slightly different conditions.

- Illegal occupations are generally associated with fragile land tenure and/or fiscal violations.
- Irregular occupations are related to noncompliance with urban regulations, particularly in relation to land development plans and building codes.
- Clandestine settlements are areas that officially do not exist, that is, areas with no title deeds filed at the public registry. The term also applies to occupations of public areas.

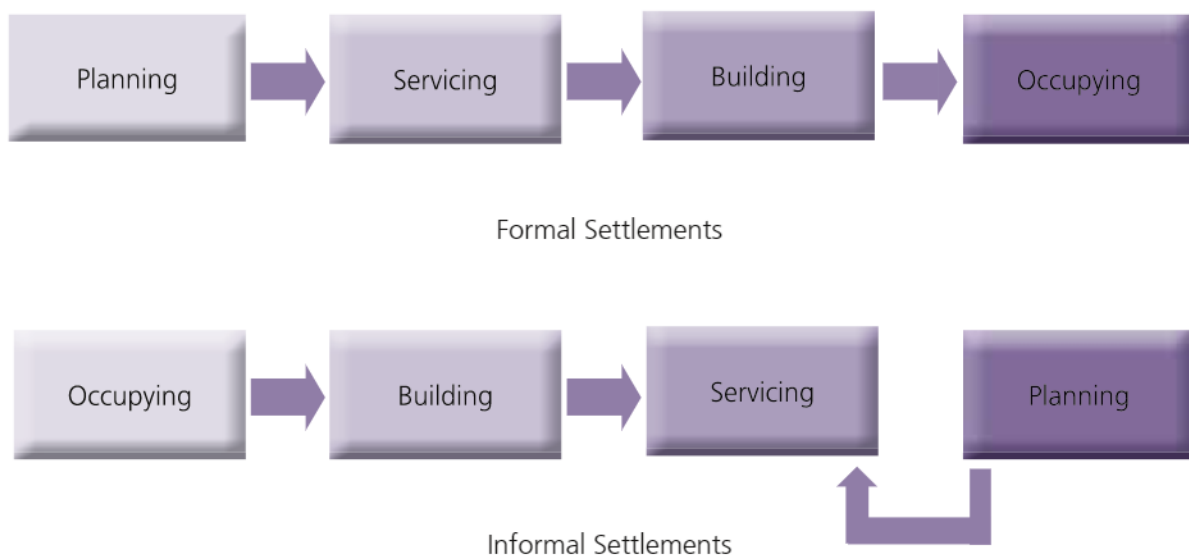
In the strictest sense, all of these terms imply some type of deliberate act to break the law. But for most families living in these areas, informal settlements are the only choice available. As such, they may have a legitimate right to occupy the areas. This ambiguity reflects the fact that legality and legitimacy do not necessarily overlap.

For purposes here, informality includes situations where property rights (not necessarily freehold tenure) are transferred through private contracts that are not publicly registered. Informality also refers to situations where land developers comply with urban standards and regulations but do not register the properties to avoid paying fees, taxes, and other costs.

As synthesised by Barross (Barross, 1990), the sequence of informal land development is the opposite of classical formal land development (see Figure 2.1).

Formal land development begins with planning and ends with the occupation of fully finished houses, which invariably occurs after urban services are in place. Informal land development, in contrast, typically begins with occupation of a land parcel through a series of market transactions involving the landowner, the developer (or subdivider), and future residents. Buyers purchase the right to occupy a piece of land through a private contract that may or may not be recognised in the public registry. The building process begins immediately even if plot boundaries and street layouts are only roughly delimited.

FIGURE 2.1 TYPICAL PROCESSES OF LAND DEVELOPMENT: FORMAL VS. INFORMAL SETTLEMENTS



Source: Barross 2009

The need to ensure possession encourages occupants to build rapidly with whatever materials are available (Abramo, 2003). The level of public services and infrastructure provided varies enormously, although these investments are normally made after the land occupation. Occasionally, government authorities may establish a plan to redevelop the area to improve settlement conditions.

When the landowner acts as the informal developer, he or she is simply seeking to maximise profit and therefore ignores the need to comply with urban standards, regulations, or building codes. The buyers purchase the illegal plots in good faith, even though the properties meet neither urban regulations nor the necessary conditions to guarantee the property title. When an official inspection finally occurs in the area, the houses are usually partially built and the community is organized to prevent eviction. Public authorities are rather tolerant toward informal settlements because there are no other housing options for the low-income segment of the population.

Widespread informality in third world cities is projected to continue on a massive scale. The latest UN-Habitat estimate (UN-Habitat, 2003) shows that 928 million people—32 per cent of the world's urban population and 43 per cent of the population in developing countries—live in settlements with precarious urban infrastructure and public services. If current trends and policies continue, the report projects that the slum population will increase by 37 million a year to a total of 1.5 billion people in 2020. Although Latin America is home to only 9 per cent of the world's population, it accounts about 14 per cent of people living in slums.³

³ Estimated shares of informal settlements in specific Latin American cities include 39.5 per cent of households in Rio de Janeiro, Brazil (Instituto Pereira Passos, 2002); and 39 per cent of the population of Caracas, Venezuela (Angel, 1999).

Why is Informality a Problem?

Although certain scholars and public officials extol the virtues of informality as either an ingenious solution or an expression of popular creativity, the reality is much grimmer. Informality distorts how urban land markets function because illegal, irregular, and clandestine operators reap higher profits by avoiding the costs of taxes, protecting the land from invasions, or providing mandatory infrastructure and public services.

Contrary to expectations, land prices in informal settlements are often higher than in formal areas when discounting for the costs of providing water, public lights, drainage, sewerage, and other public equipment and services. This is an example of the so-called cigarette effect, where street vendors sell each cigarette above its pro rata value to those who cannot afford the whole package. In informal settlements, the reduction in lot size according to the buyer's purchasing capacity thus results in a higher sales price per square meter.

It is noteworthy that prices in informal markets are formed through similar mechanisms as those in formal markets. Nevertheless, the attributes associated with land values are distinct. For instance, in informal settlements, a premium is paid for "urban freedom,"⁴ for the expectation of future regularization and upgrading benefits, and for a more flexible, albeit draconian, form of payment. Because buyers have no access to formal credit (due to lack of property title, among other factors), sellers are often willing to allow installment payments. The buyer and seller are complicit in an arrangement where the former accesses land relieved of the costs related to urban and building requirements, while the latter is compensated for bringing land to the market.

⁴ The term -originally conceived by Turner and Fichter (1972) and revived by Abramo (2003)- refers to the noncompliance with urban standards, regulations, and building codes.

In addition, informality is expensive for society. The application of curative policies -that is, the cost of upgrading irregular settlements in terms of providing adequate urban infrastructure and public services- is higher than the cost of new land development. The typical cost of regularization programmes varies from USD\$2,500 to \$3,500 per family, or two to three times the cost of urbanizing formal areas (UN-Habitat, 2005).⁵

In addition, informal development offers fewer social benefits than formal land development. For instance, formal developments must donate approximately 35 per cent of the land area to public spaces such as green areas, streets, and public schools. Furthermore, informality has indirect social costs such as the proliferation of crime, not to mention the hazards related to natural disasters. The lack of hygienic conditions in informal settlements also imposes an excess burden on public health systems.

Causes of Informality

As Durand-Lasserve and Clerc (Durand-Lasserve and Clerc, 1996) argue, the geographic distribution of urban poverty tends to overlap with the pattern of informal settlements, but poverty cannot entirely explain the magnitude and persistence of informality. As Smolka has demonstrated, not all occupants of such settlements can be considered poor (Smolka, 1991).

In Latin America, the proportion of illegal or irregular settlements is typically much higher than the number of families living below the poverty line. Similarly, the growth rate of informal occupations is higher than that of poverty. Attributing the increasing number of informal settlements to poverty is therefore simplistic.

⁵ UN-Habitat Annual Report (2005) estimated the cost of improving slums at \$670 dollars per person.

One obvious explanation for informality is the lack of social programmes providing housing alternatives for the poor. According to Fernandes, part of the growth of informal settlements reflects the absence of an effective and comprehensive housing policy at all government levels (Fernandes, 1997). Moreover, governments in developing countries have been incapable of providing urban infrastructure and public services in poor areas. Durand-Lasserve and Clerc conclude, "The lack of infrastructure and services and the difficulties encountered in overcoming this area, even more than insecure tenure, are the main criteria for defining irregular settlements." (Durand-Lasserve and Clerc, 1996).

Land use regulation is frequently identified as another source of informality in that the majority of the population cannot comply with established regulations. In a laxer regulatory context, less informality would thus be expected. Nevertheless, stricter regulations are imposed precisely to prevent undesirable land use. In other words, as long as society deems certain land use patterns as unacceptable, a regulation is needed. Achieving the right balance is not straightforward: over-regulation creates exclusive high-priced zones, while under-regulation creates an opportunity for unscrupulous agents to pursue predatory practices.

Finally, it must be noted that informality begets informality. This is easily inferred from the fact that the high profits accruing to informal developers provide an incentive to expand such developments.

Myths of Informality

The conventional wisdom surrounding informal settlements and their residents often reveals in the following misconceptions, which have helped to support the argument against instituting property taxes in informal areas.

- **Informal settlements are homogeneous entities that are clearly distinct from formal settlements.** In fact, informality takes many forms. Formal and informal developments are not dichotomous categories but instead exist along a continuum. Moreover, there are numerous differences among settlements that fall within the same category as well as great heterogeneity within a single settlement. Rich and poor sectors exist side by side in informal settlements just as they do in formal areas.
- **Only unemployed and informal workers live in informal settlements.** This perception has been challenged ever since publication of *The Myth of Marginality* in the 1970s (Perlman, 1976). Many studies have found that residents of informal areas are heterogeneous, some of them work, and some of them have formal sector jobs. For instance, many automotive workers in São Paulo, Brazil, live in informal settlements.
- **Occupants of informal settlements are poor.** Several studies have found that consolidated, well-located informal settlements are hardly ghettos of the poor. As Smolka has demonstrated, there is ample evidence of poor people living in formal areas and non-poor people living in informal areas (Smolka 1991).⁶ According to Abramo, family ties influence the decision to remain in the community even after individual income rises (Abramo, 2003). The exchange of favors and services among neighbors in informal settlements is an important benefit. Moreover, the complex sociopolitical and economic organization of informal settlements—which tends to require the presence of owners to rent or sell rooms and second homes and to run local businesses—also prevents residents from leaving.
- **Occupants of informal areas are neither willing nor able to pay property taxes.** Not only are residents usually willing to pay, but they are also able to do so in many instances. Payment of the property tax is a way to legitimise their right to public services and other urban improvements. It is also important to note that occupants of new land developments have already paid the equivalent of a property tax in the form of higher prices. As explained later, the revenue from property taxes in formal areas is capitalised into lower land prices. Moreover, Latin American tax administrators do not perceive the rich as necessarily better taxpayers than the poor (De Cesare, 2003, 23).
- **Occupation of informal settlements does not occur through market transactions.** Access to land at the urban periphery—and even to a large extent in the more consolidated informal areas—is no longer gained primarily through land invasion. Instead, as Tachner observes, no matter what type of land use or quality of houses are produced, there is a market where irregular plots and houses are advertised, sold, and rented (Tachner, 2003). Even when land is invaded, the organizers of the invasion collect a fee as a way of selling the right to occupy the area.
- **Formal property title facilitates access to credit.** Property ownership does not necessarily guarantee access to credit. For example, occupants of informal settlements in Lima, Peru, have received more access to credit (albeit at a modest

⁶ The findings of a recent study conducted by the Institute Pereira Passos in Rio de Janeiro (2002), based on the Census of 2000, indicate that about 64 per cent of the population classified as poor (per capita income of less than a minimum salary of about USD200) did not live in informal settlements. See also, Smolka (1992).

level) from private financial agents than owners of regularised properties. This evidence, first published by Calderon (Calderon, 2002), suggests that formal workers holding informal properties may be more successful in getting credit than informal workers who live in formal housing.

Moving away from these misperceptions is an important step toward instituting the property tax in informal settlements.

2.3 PROPERTY TAX PERFORMANCE IN CITIES WITH EXTENSIVE INFORMALITY

In most Latin American countries, the property tax has been fully implemented for more than a century. This long tradition contrasts with the poor performance of the property tax systems in the region. Lack of universality, low effective rates, inequities in assessment, and low collections have limited the social, financial, and urban benefits from such a tax (De Cesare, 2002, 2006). Indeed, local officials generally admit that there is ample room to improve property tax administration.

The importance of the property tax as a source of revenue source is still marginal. Based on data collected from 2000 to 2003 (De Cesare, 2006), Uruguay is the only Latin American country where property tax revenue represented more than 1.0 per cent of GDP. In Colombia, the share was 0.71 per cent, Chile 0.68 per cent, Argentina 0.58 per cent, and Brazil 0.57 per cent.⁷ In the rest of the countries examined -Panama, Mexico, Honduras, and the Dominican Republic- property tax revenues made up less than 0.50 per cent of GDP. At the same time, the property tax represented 3.8 per cent of the total tax burden in Chile, 2.7 per cent in Argentina, 1.3 per cent in Brazil, and 1.0 per

⁷ The share for Brazil takes into account two taxes: the tax on urban property and the tax on rural property. In the other countries cited the share takes into account only the revenue collected by the urban property tax

cent in Honduras.

By comparison, in OECD countries in the 1990s property taxes represented on average 1.44 per cent of GDP on average in OECD countries in the 1990s (Bird and Slack, 2004). The revenue collected from the property tax is highly important in Australia, Canada, the United Kingdom, and the United States, where the revenues contributed between 2.5 per cent and 3.0 per cent of GDP.

One common explanation for the poor performance of the property tax in Latin America is the presence of rampant informality. Nevertheless, the following analysis finds no empirical support for this claim. As suggested later, the relation between property tax performance and informality is much more complex.

Informality and Property Tax Collection

This section presents a preliminary attempt to relate property tax performance to the presence of informality. The database was obtained from a survey on issues concerning local government performance in Brazil carried out by the Instituto Brasileiro de Geografia e Estatística (IBGE) in 1999 (IBGE, 2001).⁸ The first criterion for classifying municipalities was the existence of slums.⁹ The second criterion was the existence of any type of irregular land development (including slums). As Table 2.1 shows, slums existed in approximately 28 per cent of Brazilian municipalities, while irregular land developments were present in approximately 44 per cent.

⁸ Despite the official character of the survey, it should be noted that the information is not very reliable because it was obtained through telephone interviews without much control regarding the source. It is nevertheless the only census available combining information associated with informality, fiscal results, and urban policy indicators.

⁹ Slums are identified as "subnormal agglomerations" and must satisfy the following conditions: (a) form a group of more than 50 housing units; (b) occupy the land illegally; and (c) exhibit a disorderly pattern of urbanization and/or lack essential public services. Because the municipality defines whether a block is subnormal or not, political concerns may influence the definition.

TABLE 2.1 PROPERTY TAX REVENUE VS. INFORMALITY

		ALL CASES	SLUMS			IRREGULAR LAND DEVELOPMENT			
			No	Yes	Not informed	No	Yes	Not informed	
Number of Cases		5,506	3,971	1,520	15	3,077	2,418	11	
Cases (%)		100	72.12	27.61	0.27	55.88	43.92	0.20	
Property Tax Revenue per Inhabitant	Expected	Mean	22.32	19.30	29.68	16.99	15.18	30.09	256.39
		St. deviation	134.19	150.31	83.44	14.84	86.04	172.20	355.02
		COV (%)	601.06	778.77	281.13	87.36	566.84	572.26	138.47
		Min. value	0.00	0.00	0.00	0.11	0.00	0.00	5.36
		Max. value	7,227.46	7,227.46	1,675.32	44.65	3,179.04	7,227.46	507.43
	Collected	Mean	9.51	7.44	14.51	7.95	6.54	12.67	170.90
		St. deviation	28.18	20.00	41.37	9.36	20.20	33.99	238.06
		COV (%)	296.27	269.00	285.08	117.73	308.68	268.29	139.30
		Min. value	0.00	0.00	0.00	0.08	0.00	0.00	2.56
		Max. value	938.97	502.43	938.97	26.59	502.43	938.97	339.24
Income per inhabitant 2000	Mean	173.60	169.08	184.96	189.71	155.52	195.92	148.63	
	St. deviation	96.15	90.58	108.29	96.87	88.90	100.01	89.26	
	COV (%)	55.38	53.57	58.55	51.06	57.16	51.05	60.06	
	Min. value	28.38	28.38	30.43	51.55	28.38	30.43	55.93	
	Max. value	954.65	954.65	809.18	364.21	954.65	809.18	315.41	
Population 1996	Mean	28,196.19	13,716.45	66,087.52	21,810.80	14,410.57	45,816.30	11,187.00	
	St. Deviation	173,130.98	21,021.30	324,780.00	28,830.78	50,757.57	13,798.50	15,040.52	
	COV (%)	614.02	153.26	491.44	132.19	352.22	30.12	134.45	
	Min. value	754	754	1,404	4,388	754	1,089	1,119	
	Max. value	9,839,066	438,986	9,839,066	112,712	1,965,513	9,839,066	55,033	

Note: The existence of slums and irregular land developments was not informed in 15 and 11 municipalities respectively. The property tax revenue is provided in the Brazilian currency at the 1998 values.

TABLE 2.2 OCCURRENCE OF SLUMS IN BRAZIL

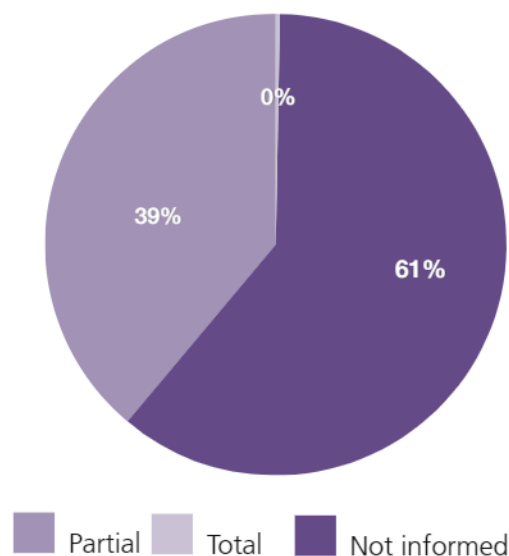
Occurrence of Slums	Municipalities	%
Yes	1,520	27.61
No	3,971	72.12
Not informed	15	0.27
Total	5,506	100
Inclusion of Slums in the Cadastre	Municipalities	%
Yes	798	52.50
No	684	45.00
Not informed	38	2.50
Total	1,520	100

Source: Survey undertaken by the Instituto Brasileiro de Geografia e Estatística (IBGE). *O Perfil dos Municípios Brasileiros*. Rio de Janeiro, Brazil (1999).

The existence of slums appears directly related to the size of the city. Indeed, municipalities with slums are much larger than average (or than cities with no slums). The same generally holds true for the presence of irregular settlements. Notwithstanding the limitations on data quality, the performance of the property tax as a revenue source seems to be better in the municipalities where slums and irregular land developments exist. The data thus do not support the hypothesis that property tax revenues per capita are lower in municipalities with informal settlements. However, it should be kept in mind that tax performance among municipalities varies widely in terms of actual and expected (assuming no tax evasion) tax revenue per inhabitant.

The evidence also suggests that local authorities in Brazil have little capacity to monitor and control informality. Local cadastres included information on slums in only 52.5 per cent of the municipalities where slums were present (see Table 2.2). Moreover, in 61 per cent of the cases, local administrators recognised that

FIGURE 2.2 COVERAGE OF THE CADASTRE IN SLUMS



records for slum areas were not fully accurate and/or complete. In only 39 per cent of the cases were slum properties fully recorded in the cadastre (See Figure 2.2).

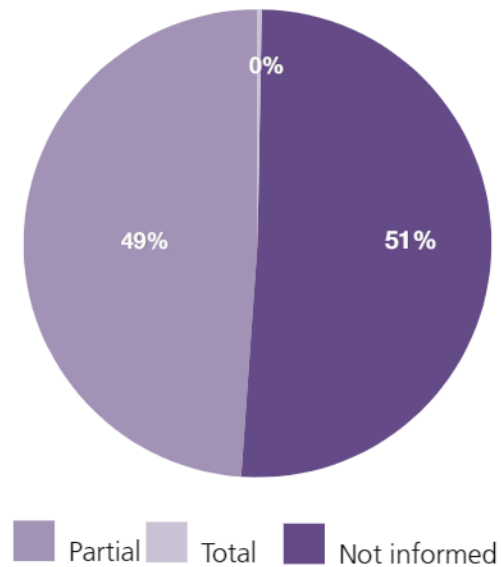
As mentioned, irregular land developments are found in about 44 per cent of the municipalities in Brazil (See Table 2.3). They are partially recorded in the cadastres in approximately 49 per cent of the municipalities and totally recorded in 51 per cent (see Figure 2.3). In most cases, municipal officials recognise that their records of informal areas were incomplete.

Based on data for municipalities with complete information, multiple regression analysis was used to test the influence of informality on property tax revenues per capita. The relationship was controlled with other attributes, including average income per capita, size of the population, and a set of variables associated with the role of the local government in urban development.

TABLE 2.3 OCCURRENCE OF IRREGULAR LAND DEVELOPMENT, BRAZIL

Occurrence of Irregular Land Development	Municipalities	%
Yes	2,418	43.92
No	3,077	55.88
Not informed	11	0.20
Total	5,506	100
Inclusion of Irregular Land Development in the Cadastre	Municipalities	%
Yes	1,220	50.45
No	1,133	46.84
Not informed	65	2.69
Total	2,418	100

FIGURE 2.3 COVERAGE OF THE CADASTRE IN IRREGULAR LAND DEVELOPMENT



Source: Survey undertaken by the Instituto Brasileiro de Geografia e Estatística (IBGE). *O Perfil dos Municípios Brasileiros. Rio de Janeiro, Brazil (1999)*.

The model was specified selecting variables with the most appropriate functional form, higher explanatory power, and lower standard errors. Minimization of the number of independent variables for the achieved goodness-of-fit was also sought. Given these requirements, the final model excluded municipal population size. Following standard procedures, the model includes only variables that were statistically significant at the 5 per cent level (Table 2.4). The dependent variable and the average income per inhabitant were transformed into a natural logarithm.

The model explains approximately 72 per cent of the variation in the property tax revenues per capita. The residual variance can be attributed to non-observed factors omitted from the analysis and to measurement errors. The F-statistic (1,139.77) is significant at both the 5 and 1 per cent levels. Based on this model, the following factors proved to be influential in explaining either an increase or a decrease in the property tax collected.

- **Establishment of urban regulations and lot size not regulated.** The findings support the argument that municipalities with a more complete regulatory framework were able to collect more property tax per inhabitant. At the same time, the property tax revenues per capita decreased in municipalities requiring no minimum lot size. These results indicate that the presence of land use regulations has a positive impact on property tax performance, just as their absence has a negative effect.
- **Update of property cadastre and maps.** As expected, municipalities that recently updated their property cadastre and maps tended to have higher level of property tax revenues per capita. The results of the model also show that municipalities using technology more intensively (as measured by digital mapping) were likewise able to collect more property tax per capita than others.

TABLE 2.4 ANALYSIS OF DETERMINANTS OF PROPERTY TAX COLLECTION

Dependent variable: Property tax revenue collected per inhabitant in 1998, ln(x)			
Independent variables	Description	B	St. error
Intercept	-----	-29.8938	7.01505
Urban legislation	Indicates the establishment of urban regulations in the municipality, including development planning, urban zoning, zoning of areas for social interest, zoning of areas for special interest, and building code. It varies from '0' to '8' indicating from the absence of this kind of regulations to the presence of all of them respectively.	0.05892	0.00998
Lot Size not regulated	Dichotomous variable that is equal to '1' when no minimum lot size is established in the urban legislation, otherwise it equals zero.	-0.27936	0.038784
Update of property cadastre	Year of last general update of the property cadastre	0.008944	0.003516
Update of cadastral maps	Year of last general update of the cadastral maps	0.000265	0.000045
Use of digital maps	Dichotomous variable that is equal to '1' when digital maps are available, otherwise it equals '0'	0.186164	0.057880
Inclusion of informal property in the cadastre	Dichotomous variable that is equal to '1' when informal properties are recorded by the local government, no matter its degree of coverage, otherwise it equals zero.	0.107899	0.036951
Occurrence of slums	Dichotomous variable that is equal to '1' when slums are identified in the territory, otherwise it equals zero.	0.251655	0.035109
Collection ratio	The percentage of the tax effectively collected in relation to the revenue that would be expected in case of non-evasion.	0.01417	0.00063
Average income: ln(C)	Indicates the average income per inhabitant at the municipal level divided by the national average income per inhabitant, varying from 0.12 to 1.53.	2.260726	0.038880
Data	3,966	R	0.8494
Adjusted [%] ²	72.088	F	1,139.77
DW	1.91	Standard error of estimate	0.96501

- **Inclusion of informal property in the cadastre.** The results confirm the importance of a more universal tax base. This is reflected in the better performance of the property tax when local governments recorded informal properties in the cadastre.
- **Occurrence of slums.** As reported in earlier studies, municipalities with slums have higher property tax revenues per capita. As Rolnik et al. suggest, a plausible explanation for this fact is that informality is more prevalent in industrialised and/or economically dynamic cities (Rolnik et al., 1990). Assuming this is the case, the revenue collected in high-income areas and from commercial and industrial properties is likely to offset lower property tax revenue associated with informality.
- **Collection ratio.** As expected, municipalities with less tax evasion tended to collect more property tax per inhabitant.
- **Average income per inhabitant.** Also as expected, the average income per capita (which is strongly correlated with property values) is a key factor. Indeed, it is the most important variable in the equation, explaining about 42 per cent of the variation in property tax revenues per capita.

As noted above, population was excluded from the final model specification given the low correlation between population size and property tax revenues per capita. This is due in part to the wide variation in property tax revenue among municipalities of similar size. This confirms findings from previous studies (De Cesare, 2005; Villela, 2001) that found that property tax performance reflected more political will than other factors related to the size or economic conditions of jurisdictions.

That is to say, other determinants clearly account for the considerable variance in the property tax collected per inhabitant.

In addition to level of income, the results underscore the importance of effective property tax administration. Even in the presence of informality, municipalities achieved better results by maintaining updated cadastres and maps, including informal properties in the cadastre, and providing a broad framework of urban regulation.

In summary, when focusing strictly on property tax performance, the major cause of concern is not the presence of informality per se but rather the way public officials deal with it for property tax purposes. Further analysis should be undertaken to identify whether other factors explain the results reported here.

2.4 THE PROPERTY TAX AS A TOOL FOR REDUCING INFORMALITY

As noted previously, informality is largely a result of an insufficient supply of serviced land at affordable prices. This section addresses the proposition that a more vigorous property tax system may actually expand access of poor families to serviced land.

The property tax constitutes (at least potentially) the most important source of local revenues that could be used to provide urban infrastructure and services. Furthermore, the portion of the property tax levied on land value is believed to help force more serviced land to the market. In effect, a tax that significantly reduces the economic return of vacant land addresses both components of land supply, that is, production of new serviced land and the use of vacant parcels. The land value tax can be viewed as a natural incentive to develop land to its highest and best use, discouraging owners from delaying development in the hope for higher prices (McCluskey and Franzsen, 1999; Oates, 1999).

This conventional argument regarding local service provision establishes a necessary, but not sufficient, condition for a policy on informality. It is important not only to spend more on urban infrastructure and services, but also to make the right type of public investment in the right place. Moreover, the land to be forced to the market must also be in the proper location, as discussed in the following sections.

2.4.1 Benefits of Taxation of Informal Areas

The following discussion describes the major benefits of imposing a property tax in informal settlements.

Re-orienting the Provision of Serviced Land

Third world cities have a sad history of over-investing in high-income areas and neglecting low-income areas. Given the relative scarcity of serviced areas and associated land price differences, there are strong incentives for certain landowners to directly or indirectly influence decisions about which areas receive services. As a result, the process by which land gets serviced becomes a hot political currency even in informal areas. Communities where the property tax is not collected are particularly vulnerable when it comes to public services. Residents may either sell their votes through different forms of clientelism or voice their demands in social protest movements. But this style of governance overlooks the fact that, more often than thought, low-income families in developing countries are willing to pay property taxes when doing so prompts the provision of needed public services in the neighbourhood. Moreover, fair and equitable allocation of revenues provides the government greater legitimacy for levying the tax.

Gaffney adds another twist to the argument by suggesting that imposition of land value taxes is redistributive because it opens up more land to the poor (Gaffney, 1999). The differential

capitalization effect¹⁰ that benefits informal land markets is likely to increase the bidding power of the poor, enabling them to encroach on lands held by the rich. As a result, land value taxes tend to have a leveling effect across income groups, allowing the poor to move to better-quality land and live in less crowded conditions.

Reducing Land Prices

The prices of serviced land and informal land are extraordinarily high in third world cities.¹¹ Reducing land prices is fundamental to the achievement of sustainable social and economic policies (IAAO, 1997), and a property tax may be one mechanism to accomplish this. Bahl and Linn neatly state the argument as follows:

Urban land prices are frequently so high that low-income groups cannot afford to purchase land, given their disposable incomes and the prevailing capital market conditions, which prevent access to mortgage credits at affordable interest rates. To the extent that the revenue from property taxes is capitalised into lower current land values (since the tax reduces the expected future private yield on the land), it partially expropriates land ownership rights from the present owner and also constitutes a loan to future owners, who can now acquire the land at a lower price but will have to pay property taxes in the future. If low-income groups cannot buy land because they lack liquidity and access to capital

¹⁰ As a component of the expected stream of expenses, a land value tax has a similar effect (albeit with the opposite sign) to that generated by the discounted (present) value of the revenue stream expected to accrue from the land in the future. This effect is analogous to the lower rental value fetched by a property with a higher condominium fee, given two otherwise identical units. The higher the property tax (or land value tax), the lower the price a buyer would bid for a given piece of land.

¹¹ As noted by Smolka (2003), the price of a square meter (m²) of serviced land on the periphery of many cities and made available by private developers varied between USD\$32 and \$172; these figures are close to those found in cities in the developed world where per capita income is 7–10 times higher. Even a family living above the poverty line and saving up to 20 per cent of its monthly wages (USD\$200) for housing would need 12–15 years to accumulate enough to acquire an urbanized plot of 150 m².

markets, property taxation may be one of the policy instruments to improve their access to land ownership. (Bahl and Linn, 1992)

The capitalization effect is particularly important because buyers of informal plots usually acquire land in installments, embedding interest rates that are much higher than in the formal market. Thus, a land value tax has potential relevance as a surrogate credit system for acquiring serviced land.

Improving the Efficiency of Serviced Land

As Furtado observes,¹² it is common in third world countries to see extensive areas at the urban periphery that have services but remain unoccupied, as well as extensive unserviced areas that are informally occupied. One possible explanation for this pattern is the common strategy for marketing and servicing land known as leapfrogging. Both formal and informal developers often leave vacant land between old subdivisions provided with public services and their new subdivisions. As land parcels at the new site are sold and occupied, bus routes and privately provided services typically extend from the old site through the vacant area. The same applies to public services. To reach the new site, the services have to expand through the vacant areas, which immediately benefit from the new facilities (Cardoso, 1975).

This process explains both the profitability of peripheral development and the forces promoting urban sprawl, which raise the cost of providing public services and equipment. Imposing a strong land value tax would clearly deter the speculative component of leapfrog development. It would also encourage more compact cities and more rational development patterns, allowing more efficient use of the existing infrastructure (Brown, 1999).

¹² F. Furtado, unpublished Master's thesis, 1993. *Urbanização de Terras e Ocupação do Solo Urbano – Elementos para a Análise do Processo de Crescimento das Cidades Brasileiras*. IPPURI/URFRJ.

Regularizing Titles to Informal Land

Local government recognition of occupancy usually does not guarantee property titles at the public registry. As Rabello de Castro argues, however, relying on a cadastral registration number is a feasible way to certify tenure rights (Rabello de Castro, 2000). Informal occupiers may thus perceive the property tax as a kind of an “entry card” to access the legal world.

The City of Mauá at the periphery of São Paulo provides an illustration. This jurisdiction issues Individual Regularization Certificates for occupants of pirate/ clandestine subdivisions to regularise their plots regarding property tax contributions. Under a Municipal Act (Decree 6.692), occupants of informal areas decide whether or not to regularise their parcels by registering in the cadastre. Those that do not, are exempt from the property tax due from the whole area. In addition, occupants may now obtain a Regularization Affidavit to facilitate the eventual legalization of titling.¹³

Providing a Valuable Information Source

Another advantage of extending the property tax to informal parcels is the fact that its application requires basic knowledge of the area. The information necessary to collect taxes has immeasurable value to city management, as well as to the private sector if publication of the data is guaranteed. In addition, recognition of informal settlements may indirectly stimulate the interest of public authorities in the area, resulting in better provision of public services and expanded opportunities for low-income families.

2.4.2 Directions for Improved Property Tax Policy and Administration

The Latin American experience offers several lessons about the challenges that informality poses to property tax administration, including the need to design feasible and

¹³ Prefeitura do Município de Mauá. Decreto No. 6692 de 13 Abril de 2005.

politically acceptable procedures. The following lessons are presented in the form of policy recommendations.

- **Extending tax liability to alternative forms of secure tenure.** Limiting the tax liability to property title holders reduces the tax base in countries with widespread informality. Conventional wisdom now holds that the legal incidence of a tax falls primarily on the person liable for its payment. The owner's liability is usually combined with the public authority's right to seize and dispose of the property when the tax is unpaid. This prerogative is an effective sanction to enforce payment since the tax is secured by the property. Thus, there should be no major impediment to considering alternative forms of secure tenure to improve universality of the property tax.
- **Bypassing assessment difficulties posed by progressive housing.** Most Latin American countries define the capital value (including land and improvements) as the tax base, often regardless of tenure status or degree of irregularity. Implementation of this approach is likely to be problematic in informal areas where self-production of houses is common and improvements are often made gradually. Consequently, proper taxation of informal properties would require more frequent inspections.

Given this challenge, other approaches may be preferable. A strong argument for using site value as the basis is that it would reduce the burden of frequent inspections. Indeed, many jurisdictions in Baja California, Mexico, have switched to a full site value tax base to reduce exactly this administrative burden. In addition, site

value taxation is arguably ideal from an economic point of view because since it is uniquely nondistorting (see, for example, Brueckner, 1986; Lichfield and Coleman, 1997; Harriss, 1999; and Tideman, 1999).

Another approach to dealing with progressive housing is to rely on self-reporting schemes, passing responsibility for declaring what property improvements have been made on to taxpayers. Given the high cost of controlling the accuracy of self-reports, however, this approach may be unfeasible for local authorities. It may thus be necessary to involve other agents in the task, such as neighborhood associations or community organizations. These groups are motivated to confirm property values in that their demands for public services depend on the legitimacy of their tax contributions. In other words, the benefits shared within the community would help make the tax acceptable, which in turn may induce taxpayers to declare their property improvements accurately. The reliability of self-reporting schemes would also improve if municipalities earmark revenues for investments in the neighborhoods where the tax is collected.

- **Adjusting the tax burden on the poor.** Although the number of informal occupiers with the ability and willingness to pay the property tax is often higher than expected, many families do not meet the affordability criteria. Measures that are widely applied in formal areas to reduce or eliminate the tax burden on the poor should be extended to informal areas. This tax relief may include individual deductions

according to property value,¹⁴ family income, or both, as well as the use of progressive rates starting at a symbolic value and moving up according to classes of assessed values. While having no impact in terms of revenue, symbolic tax payments are likely to contribute to the creation of fiscal culture.

- **Updating urban cadastres.** In informal areas, establishing and maintaining the cadastre system are major obstacles to property tax implementation. Over and above issues related to determining the tax liability for properties with unclear tenure rights is the critical problem of recording irregular plots, land subdivisions, and buildings. Conventional cadastral procedures and techniques often cannot keep up with such physical and legal idiosyncrasies. More flexible solutions at low cost may therefore be required. One option would be to partner with organizations that provide public services or social programmes in the area to collect the information necessary to update the cadastre system. In addition, neighborhood associations and the community in general may have to share responsibility with public authorities for keeping property records current.
- **Assessing informal property.** There are many reasons for concern about the accuracy with which properties are assessed in Latin America. Overly long assessment cycles, inconsistencies in the standard assessment model, and lack of systematic control over assessed values have resulted in low assessment levels and a low degree of uniformity even in formal markets (De Cesare, 2006).

¹⁴ This is known as the homestead exemption. Similar to progressive tax rates, the approach provides greater benefits to taxpayers occupying low-valued properties than to those occupying high-valued properties despite a lower effective rate. However, the homestead exemption is simpler and benefits all taxpayers.

Assessing informal property poses even greater challenges, including the need to take into account atypical determinants of property values (such as the value of urban freedom) and nontraditional sources of information (such as neighborhood association records on property transactions).

As Abramo has demonstrated, however, informal areas generally have vibrant property markets and the analysis of land price determinants is as feasible there as it is in formal markets (Abramo, 2003). In addition, as the experience in Colombia, Costa Rica, Guatemala, Mexico, and Peru attests, a self-assessment approach may be workable. The benefits include a high degree of acceptability, elimination of objections and appeals, a low-cost solution to lack of information, simplicity, reduction in assessment time and cost, and development of a fiscal culture. Perhaps the most well-known success story is Bogotá, Colombia, where the self-assessment scheme has increased assessment levels and expanded tax rolls significantly (Puentes, 2002). It has also improved cadastral coverage (Dillinger, 2000).

- **Minimizing tax evasion.** Contrary to common perceptions, tax evasion is more likely to occur among owners of high-valued properties than among owners of low-valued properties. Local officials repeatedly state that poor families are quite willing to have their properties included in the fiscal cadastre and to pay the property tax.
- **Establishing a fiscal culture.** As in formal property markets, a sustainable and efficient tax system in informal markets requires a sensible adjustment of the tax burden according to ability

to pay, demonstration of the public benefits related to the payment of taxes, promotion of educational programmes explaining the rights and duties of citizens, and imposition of effective and fair penalties in cases of nonpayment. Indeed, the higher administrative cost of taxing low-valued properties can be offset by the benefits of strengthening fiscal culture throughout the city.

2.5 CONCLUSION

Many Latin American countries with widespread informality have in fact implemented some of the initiatives described here, including the imposition of higher tax rates on vacant sites, use of progressive tax rates, and introduction of self-reporting schemes and even self-assessment. These policies have been largely ineffective, however, in great measure because of poor property tax administration and lack of judicial support. Indeed, inequities and inefficiencies in property tax administration distort distribution of the tax burden and, in most cases, result in poor revenue collection.

Practical measures to improve administration of the property tax include reducing the assessment bias; integrating cadastres with other databases managed by organizations responsible for social policies and public services; involving taxpayers as partners in updating cadastral data; minimizing political influence in primarily technical matters (e.g., property assessments and value maps); and educating magistrates about the social, economic, and financial impacts of matters related to land regulation, regularization, and taxation.

Transparency and dignified treatment of potential taxpayers are essential in both formal and informal areas. Broad acceptance of the property tax can be fostered by sound public investment policy to reduce social

inequality and provide universal access to public services and equipment, as well as by extending cadastre coverage to include informal properties. Creating an environment where low-income families have access to basic public services would certainly increase their willingness to pay the property tax.

An effective property tax system does, however, conflict with the current structure of land markets in developing countries. Patrimonialism is still emblematic of Latin American societies, with control over land providing a cash cow for many powerful stakeholders. Thus, resistance to imposing the property tax in informal areas is less likely to come from the low-income residents of those areas than from wealthy individuals and businesses owning large tracks of underdeveloped land or high-valued properties. Change in this state of affairs is no easy task, but the benefits of instituting a vigorous tax on real estate property would certainly justify the effort.

This chapter provides evidence that collection of property taxes in informal areas may not only be possible but also, under the right circumstances and within well-defined limits, an attractive way to pursue a more effective urban policy. That is, implementing a vigorous property tax system would potentially mitigate informality and its negative effects on society in general and on occupants of irregular settlements in particular.

The part of the property tax levied on land value could help to minimise the distortions observed in land markets with extensive informality. At best these benefits include stimulating land development, deterring land speculation, reducing land prices, increasing the supply of serviced land, promoting more efficient provision of urban infrastructure and services, encouraging more compact development, and creating a more rational pattern of growth.

The empirical analysis presented here confirms the importance of sound property tax administration. The findings support the argument that, even in the presence of informality, municipalities can pursue measures to improve property tax performance.

In summary, when focusing strictly on property tax performance, the major cause of concern is not so much informality itself but the way public officials treat it. Introducing the property tax into an environment with rampant informality requires special caution. The challenges are many—including the need to understand the informal market, curb land ownership interests, improve administrative capabilities, and demonstrate how tax revenues can result in social benefits for the poor.

Overcoming the prejudice and ignorance of public officials regarding informality is also

essential. Interestingly, imposing an efficient property tax system in informal areas would also likely contribute towards reducing informality.

Finally, there is urgent need for empirical research on the critical relations between the multiple forms and manifestations of informality, fiscal alternatives, and regulatory treatments. Future research should also examine the relationship between land price formation in formal and informal markets. Another topic of concern relates to the impacts of changes in property tax collection practices and land prices, as well as property prices that take improvements into account. Finally, case studies and comparative analyses of innovative approaches to property tax management are essential to overcome the current limitations on aggregate data analysis such as the one presented in this chapter.

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03 REGULATORY FRAMEWORKS FOR LAND VALUE TAXATION IN POLAND

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Abstract

This chapter presents current regulation on assessing adjacency levies in Polish legal system, which is based on ad valorem formula. This chapter explores how adjacency levy is an appropriate tool for private owners and developers' participation in the cost of providing local public infrastructure. Looking at the historical evolution of adjacency levies, the chapter notes clear linkages levies and an increase in the land value of land and land subdivision. The chapter explains how using cadastral value in Polish system may not be the most suitable approach. A distinction is made between the adjacency levies and planning fees, which then leads to evaluate how an increased adjacency levies (resulting from the increased property value) can be established prior construction of the public road. The chapter notes that it might be counter-productive to continue calculating the amount of adjacency levies on the basis of the increasing property value. It is noted that alternative options should be explored, including how the property developer's contribution system may yield better outcomes. The chapter also puts forward a proposal to improve methods to calculate adjacency levies taking into account other relevant factors such as: the length of the plot's upfront stretch, the surface and the character of the built environment.

3.1 INTRODUCTION

It is worth stressing the fact that no single local community can exist nowadays without having access to the vital public infrastructure. However we are very often confronted with a serious problem when it comes to funding such an investment. There are many cases in which the tax revenues, collected by the local governments are simply not sufficient to foot the bill for constructing new roads, drainage systems, schools and kindergartens. That is why a due consideration was given to the possibility of making the property owners pay their share of the burden for the development of public infrastructure, in a situation when such improvements are reasonably believed to have benefited them. Thus the adjacency levies¹ became an integral part of the Polish legal system. One has to be aware of the fact that this fiscal tool has gradually lost its linkage to the property law and its civil law elements.

This chapter discusses why adjacency levies are having a direct impact on this state of affairs. It also examines whether it is justified to consider the adjacency levies as a form of a fee, which is charged as a result of the increase in the property value. An attempt will also be made to determine if such a formula can be considered as the most suitable tool for measuring the extent to which the property owners and developers are required to participate in the costs of providing the local public infrastructure.

Having this in mind, the following section (3.2) describes the historic evolution which the adjacency levies have undergone in Poland over the past century. It also shows how the gradual evolution the adjacency levy has become closely linked to the increase in the property value.

¹ Adjacency levies are compulsory charges imposing on selected properties for a particular improvement and services that benefits the owners of such properties.

Section 3.3 is devoted to exemplifying the analysis of the adjacency levy, which is charged as a result of the property division and is directly linked to its ensuing increase in value. This section also explains how best to make a distinction between the adjacency levies and betterment fees. This section will also discuss the adjacency levy, charged following the construction of public infrastructure.

Section 3.4 of this chapter is devoted to determining whether it is really justified to calculate the amount of adjacent levy on the basis of the property value increase. It also considers if such a mechanism is appropriate for shaping the system, allowing the property developers to make a direct financial contribution. The chapter also explores whether an increase in the property value should be deemed as a basis for setting an amount of a fee. The chapter outlines alternative ways of calculating the fee which are directly based on different criteria such as the length of the plots upfront lane, its space and the type of building.

3.2 HISTORICAL ORIGINS OF THE REGULATORY FRAMEWORK

The roots of the Polish regulatory framework, regarding the adjacent levies, can be traced back to an old legislation, enacted upon an emperor's assent in the Kingdom of Prussia. The Prussian legal act *Fluchliniengesetz*, of July 2nd 1875, introduced statutory regulations for designating and performing architectural changes of streets and squares in cities and towns. This act mentioned for the first time the possibility of making the property owners pay the cost of construction and provision of street lighting, located adjacent to their properties. It was assumed that each owner of property adjacent to roads would contribute to the overall road construction costs. The amount of money to pay would be directly proportional to the boundary length of a road-adjacent parcel.

After regaining its independence in 1918, Poland adopted a regulation which stipulated that the property owners who had reaped special benefits, resulting from the construction of public infrastructure, are obliged to carry their fair share of the corresponding investment costs. The above-mentioned legal obligation was foreseen in accordance with Article 23 of the Law on the construction and maintenance of public roads in the Republic of Poland, enacted on December the 10th, 1920. This legal act made it possible for private owners to contribute to the road construction costs.

The legal regulations, laid down in the Decree on the Construction law and Building of Neighborhoods (signed into law by the then Polish President, Ignacy Mościki on February, 16th, 1928), had played a crucial role in shaping this new legal framework. The regulation, contained in an Article 174 of the above-mentioned Decree had stated that the owners of the street-adjacent parcels be asked to pay for providing the so called “first installation to the road, the width of which do not surpass 20 meters.” This regulation also stipulated that the owners of adjacent parcels be asked to make a financial contribution relative to the tangible economic benefit reaped by such an owner. However, the owners, whose parcels were not adjacent to the street, were expected to pay for the street-installations only in a situation when they gained some special benefits and the corresponding legal regulations had imposed a legal obligation on those property owners to participate in the street-installation costs.

The second important regulation, contained in the Decree (Article 64), imposed on parceled land owners an obligation to provide, at their own expense, the necessary technical installations for streets and roads as well as squares, parks and public-use areas, as designated in the local building plan. The concerned owners were also obliged to ensure the proper technical maintenance of those installations. The owner, whose land was subject

to a land readjustment procedure, could have been obliged to provide technical installations for street, roads and parks. However, in such a case a total surface area, designated for such public-use spaces could not have exceeded 25% of the total building land area, provided for in the readjustment plan, especially when the plot size was less than 15 hectares or did not surpass 35% of total plot area, if the plot size exceeded 15 hectares.

A new fee, levied by the State authorities to tax the increase in the property value, was introduced to the Polish legal system by a Law on management of urban and residential areas, enacted on 14 July 1961 (OJ No. 32, item. 159). According to the Article 28 of this Legal Act, people whose properties were located within cities and neighborhood boundaries had to pay such a fee. However, this obligation was also extended to include the owners whose properties were located outside those boundaries in a situation where those areas had been included in the city’s zoning plans and designated to serve certain economic functions. It is worth mentioning that the legislators made an effort to distinguish between the two types of fees:

- A fee, covering the costs of providing the first technical installation to the street and squares; and
- A fee, covering the cost of other municipal infrastructure facilities (water, sewage, gas and power supplies).

The cost of providing those installations was to be charged on an annual basis.

On July the 26th, 1962, the Council of Ministers issued a special Decree on recovering the costs of providing the first installation to the street, public parks and other municipal facilities. This Decree contained guiding principles and a method for calculating the required fee. The presidium of a competent

national council, acting in full accordance with the guidelines², were responsible for setting the amount of a binding fee which had served as a basis for determining the costs of providing the first installations to the municipal infrastructure facilities.

The Law on Land Management and Property Expropriation used the term 'adjacent levies' to describe the participation of property and land owners in the construction and maintenance costs of municipal infrastructure (including gas and power supply installations). On September 29th 1990, the Polish Parliament adopted a new Legal Act (Official Journal No. 79, item 464) to amend the Law on Land Management and Property Expropriation by introducing a new regulation (Art. 17a paragraph 6). This amended Article provided that every person who had received building plots as a result of partition or consolidation of his/her property would have to pay the adjacent levy for the increase of his/her property value.

Following the adoption of this approach, the adjacency levy no longer related to the situation in which the property owners had been charged for technical improvements and was rather seen as a fee, imposed by the authorities as a result of an increase in the property value, brought about either by dividing and consolidating the property or by building technical infrastructure.

The adjacency levies constituted 50 per cent of the increase in the property value, determined by comparing the value of land before construction of the municipal, gas and power supply installations and the value of a land after its construction. The extent of financial contribution paid by owners depended on the location of such a property. That is why the certain types of areas have been designated cities, e.g. having more than 100,000 inhabitants.

² Guidelines issued by the Council of Ministers in line with Article 24 of the Law on Management of Urban and Residential Areas.

The corresponding percentage share was between 2 per cent and 15 per cent, strictly depending on the character of the 'zone' and type of installations provided.

In a situation when the size of such property exceeded the above-mentioned upper limit, the percentage share of costs would increase by 10% of the fee, fixed for a standard space for every 100 square meters of land and in a case of rural areas, for every 1000 square meters of land. However, the increase of participation could not exceed 50% of a fee, fixed for a standard space.

The Executive Order, issued on July 16th 1991, strongly influenced the way in which the adjacency levies evolved in the Polish legal system. This regulation provided a great deal of valuable legal reasoning on how best to determine a fee.

The new Executive Order was issued on April 1st 1993 to amend the existing regulations, which changed the method of setting a fee. Paragraph 4 of the Executive Order clearly stated that, "the adjacency fee amounts to the 50 % of the difference in value, determined as a result of comparing the value of the land prior to the construction of municipal infrastructure, gas and power supply installations and the value of the land after the construction of those installations."

The above-mentioned regulations on the adjacency levies retained its legally binding character until December 31st 1997.

The Real Estate Management Law took effect on January 1st 1998. The proponents of this new legislation aimed at providing a comprehensive regulatory framework for adjacent fees by anchoring the law more firmly in the form of a statutory act. Hence, the Real Estate Management Law did not contain any empowerment to issue an executive order.

The Law has an attached glossary of statutory terms that introduced the definition of adjacency levy, describing it as a “fee, collected as a result of the increase in the property value, which is caused either by the construction of technical infrastructure, partially financed by the public authorities or by division and consolidation of land.”

Article 98 paragraph 4 of the Real Estate Management Law also stipulated that, in a situation where ‘as a result of property division its value has increased, the municipality managing board may set an adjacency levy, an amount which does not exceed 50% of the difference in the property value’. This regulation introduced a new type of adjacent levy, which was closely linked to the geodetic separation of the property. However, the scope, legal reasoning and the procedure for determining the fee remained very vague. It was a serious challenge, especially given the fact that this new type of a fee was not included in the legally-binding definition of adjacency levy. This vague and potentially misleading definition used to affect, in a negative way, the interpretation of this legal institution, provided by the administrative courts.

The introduction of this kind of a fee was deemed as an overdue reaction by the legislative branch, prompted by a landmark Constitutional Court ruling delivered on May 8th 1990. The ruling stated that the acquisition of the property for the development of technical infrastructure installations amounts to an expropriation and that in a democratic country, such a procedure can only be allowed in exchange for just compensation to the owner. The Constitutional Court also ruled that the compulsory and gratuitous acquisition of the land by the public entity cannot be considered as a form of participation by the owners in the development costs of local public infrastructure.

Finally, in 2004 the revised regulation came into effect, which also currently applies to adjacency levies, collected as a result of property division.

Summing up, until 1991, the procedure of determining the amount of adjacent levies was based on rigid rates, reflecting mainly the length of the front parcel, adjacent to the land. This procedure did not take into consideration the increase of value, calculated separately for each property. In addition, this fee was seen for several years as a form of refinancing the construction costs of local public infrastructure. Since 1991 the obligation to pay a fee has been extended to include the division and consolidation of property. The adjacency levy, taxing the benefits gained as a result of property division, was introduced in 1998. The currently binding legal definition of an adjacency levy (contained in article 4 paragraph 11 of the Real Estate Management Law) makes it clear that the municipality can use this fee to capture the share of the increase in the property value, which is prompted either by the development of local infrastructure, geodetic division of property or by consolidation and division of the given property.

3.3 INCREASE IN VALUE AS A PREREQUISITE FOR DETERMINING THE ADJACENCY LEVY

Article 98a Paragraph 1 of the Real Estate Management Law stipulates that when the property value has increased as a result of the division, requested by an owner, the competent (town or city mayor) can impose an adjacency levy. However, it is worth asking if such an increase occurs at all. The legislator, responsible for determining this kind of fee tends to consider the increase in the property value as being closely linked to the legal endorsement of a geodetic division of a property which can be considered as an abstract act. The surveyor, who determines

the market value of such a property as well as its most probable and economically-viable future use, should be aware of the fact that the local development plan allows for the division of such property. For example, if the local development plan allows for the division of land into smaller plots of no less than 800 square meters, which have a specified building density, the amount of the increase in the property value has been already 'hidden' in the expected property value, calculated in line with the provisions of the local development plan. In this case, it can be argued that is not the adjacency levy but rather betterment fee which should be imposed to capture the resulting increase in value.

One has to consider the possibility of a property division before determining its value. If as a result of the adoption of a local development plan, the division of property is legally admissible, this factor has an impact on its value.

The International Valuation Standards also strongly recommend considering the highest and most economically favorable return value, resulting from its use, in determining the market value. The National Valuation Standard appears to strictly follow the International recommendations, by clearly stating that the property surveyor should establish the most economically - favorable or probable property use prior to determining its market value. The designation of the future property use means that one can either continue its current use or choose the other form of using such a property.

However, the form of the most favorable property use, other than that existing on the day of appraisal, can only be subjected to valuation if there is a market demand for such property.

It is also very important for assessors to consider the competitive advertising of other properties which have the same or very similar forms of use. The form of the most favorable use can be considered separately from the land, seen as a building-free area which is to be adjusted for a given form of property use. The form of the most favorable use can also be considered separately from the property, seen as a building property. When there is a difference between the most favorable property use form and its current form, the valuation procedure is subjected to many conditions. It is assumed that an appraisal study has to set a clear timetable for the property to embrace the new form of the most favorable use and spell out the basic conditions for achieving it.

There appears to be little consideration for the fact that the property status can significantly change, as a result of dividing it into several smaller plots. Therefore, the appraisal should solely concentrate on the property and not on the individual land plots. The appraisal study has to determine the value of property as a whole and cannot take into consideration the separate plots of land. It is worth stressing that even after subdivision, the property has the same space, location and the same degree of access to the public infrastructure. Property surveyors, who calculate the increase in the property value resulting from its prior division, assume the surface of the land as the space comparative feature. Nevertheless, after division, they do not provide for the area of the entire real property but for the area of individual isolated lots.

For example: Lot no. 6/1 before division has an area of 3,200 square metres. The surveyor assumes that on the market the feature is considered average. After division, there are several lots – 6/2, 6/3, etc. The surveyor indicates that the area of lot no. 6/2 – 1,200 sq.m. – is considered better and indicates increase of the value of lot no. 6/2 as compared to lot no. 6/1 by 12 per cent.

Let us test this example against the content of Paragraph 41 of the current regulation (dated 21 September 2004) on the appraisal of real property and development of a property appraisal report.³ The report stipulates that upon determination of a real property value, in order to determine the improvement fee provided for in Article 98 (a) (1) of the Act, one shall determine the value in accordance with the condition of the real property before and after its division, and the price as of the date of issuance of a decision on the determination of the improvement fee. Subject to that, the real property condition before division is assumed as of the date of issuance of a decision authorizing the real property division. As of that date, the surveyor already holds a decision on the authorization of a draft division so the optimum manner of use needs to allow for the preliminary division permit. Thus, in most cases there is hardly any difference between the initial condition and the real property condition following division.

Paradoxically, increase of the real property value may actually take place through acquisition of a part of the real property for a public road. In this case, provision of better access to a public road increases the value of the remaining part of the real property. This is the so-called real property improvement as a result of a public event. Although the area of the real property has been decreased, the value of the remaining part increases or remains unchanged. Thus, in numerous legal systems, upon real property division part of the premises is acquired for public purposes, without monetary compensation, assuming that the very increase of the attractiveness of the remaining part of the real property is a form of compensation. This, however, has nothing to do with determining how much the real property value has increased as a result of division.

³ *Journal of Laws no. 207, item 2109 as amended.*

Based on that, there arises yet another false assumption which further separates the fee from its intended purpose, i.e. to balance the need to pay compensation for a lot acquired for a public road. Article 98 (a) (3) stipulates that if as a result of real property division there have been designated plots for a public road or to extend the existing public roads, in order to determine the real property value both in accordance with the condition before the division and afterwards, the real property area shall be decreased by the area of the lots of land designated for the roads. It is not clear how the exclusion of the part for the road prior to division may be justified. This circumstance affects the value of the entire real property. After the division, on the other hand, it is obvious that the plot acquired for a public road is not subject to an improvement fee and is not included in the real property condition.

The original legislator's concept of improvement fees due to division were supposed to be an attempt to recover part of the increase of value caused by separation of part of a real property for a public road and thus to provide the real property with better access to the public road. The essence of this type of fee ought to be perceived in the spirit of the legislation. Fortunately, the content of resolutions adopted by local governments indicates that this is frequently the case. It is not the case when the gmina⁴ perceives the fee as a purely fiscal instrument of taxation on any division.

Indeed, certain types of real property division, aimed at future development of the separated lots, shift the burden of provision of public infrastructure to the lots on the part of the gmina. Still, it is always a result of a gmina's planning decision which permits construction of a housing estate in a specific area. The very division is only an executive action with respect to planning establishments. It is worth noting

⁴ *Gmina or commune is the principal unit (lowest uniform level) of administrative division in Poland.*

here a verdict by the Provincial Administrative Court in Lublin of 14 February 2008 which contains an a priori statement that:

“it is beyond doubt that a larger real estate is more difficult to sell due to the price and the possibility of its reasonable utilisation in accordance with the needs than a real estate of a smaller area separated geodetically. Therefore, the Court has no doubts as to the circumstance that the real property value has increased as a result of division thereof. The complainant may obtain a price of sale of several smaller lots higher than from the sale of one and undivided real property. Real properties resulting from division are easier to sell, in particular when allowing for the appropriation thereof in the local zoning plan.”

This view is unfortunately repeated in judicial decisions. Though such decisions are not legally substantiated, in practice many other decisions have followed the similar ruling. The need for a different approach is on the other hand indicated by the Supreme Administrative Court. The verdict (dated 30 March 2007, I OSK 729/06) stated that “a real property division may certainly result in the increase of the value thereof but the increase does not result from the very fact of division but needs to be proven.”

3.4 COST RECOVERY FROM PROPERTY OWNERS VIA IMPROVEMENT FEES

Charging an improvement fee due to construction of technical infrastructure facilities is closest to the original regulations pertaining to the transfer of costs of construction of roads and underground sewer piping onto the owners of adjacent real properties. It is also similar to the land value tax proposed by liberal economists for over one hundred years. Contrary to the real property improvement as

a result of division discussed above, this type of fee is not related to an abstract event but to the change of the actual status of the real property through better access to public infrastructure. Hence, there occurs an actual improvement.

Pursuant to Article 146 (1) of the Act on Real Property Management, the determination and amount of the improvement fee depends on the real property value increase caused by the construction of technical infrastructure facilities. The rule is supplemented by the regulation provided for in Paragraph 40 of the aforementioned regulation stipulating that “upon determination of a real property value before construction of technical infrastructure facilities and thereafter, value of constituents of the real property shall not be allowed for in the determination of improvement fees. Moreover, upon determination of a real property value following construction of technical infrastructure facilities one does allow for the distance between the real property and the technical infrastructure facilities as well as terms and conditions of real property connection to these facilities.”

Construction of the infrastructure is an empirical event so there does not arise a problem related to the identification of the factors affecting the increase of value. As part of appraisal, the subject of the ‘before and after’ comparison is the very same real property – but parameters of access to the technical infrastructure and surrounding elements change. Therefore, it would appear that there are no obstacles as to this fee being based on the real property value increase. In order to determine the real property value, a comparative approach is used and prices of real properties without infrastructure are compared to prices of real properties provided with infrastructure. Obviously, there arises a problem if there is no appropriate local market.

In the event of improvement fees, application of Paragraph 26 of the aforementioned regulation, in many cases results in arguing the logic of determination of the improvement value. It ought to be determined how much, as a result of construction of an underground sewer piping system, the real property value has increased or decreased based on the local, not the Provincial or the national market.

Practice indicates how difficult it is to prove that the increase of value clearly results from realization of infrastructure. On the part of the bodies determining the improvement fee, there arises great uncertainty as to possible income from improvement fees for which they will sometimes need to fight for several years supporting the property appraisal report. Moreover, with the cost of the surveyor's reports, often amounting to several hundred zlotys³, means 10 - 15 per cent of a typical improvement fee of 3,000 zlotys is the cost of fee determination. In the event of cancellation by a second level agency, and undertaking a new procedure, inclusive of appointment of a new surveyor, the costs of the procedure brings fee determination in general into question.

Also, public servants find it very difficult to justify a decision on fee determination as they need to prove to the parties that the real property value increase has only and solely been caused by realization of infrastructure. They may need to refute allegations of the parties who frequently produce counter-reports. In many cases, administrative actions are conducted.

Thus, there arises a question whether the real property value increase involving individual appraisal of each real property is a correct method of improvement fee value calculation. One of the main challenges is how to design a simpler method to determine the fees without necessarily requesting a fee approval or clearance and the involvement of experts.

Moreover, practical aspects and provision of an effective co-funding instrument bring into question the plausibility of basing improvement fees on the real property value increase. The aim of the instrument is supposed to be the provision of co-funding for public investment by the entities using it. The title of Chapter 7 Section III of the Act on Real Property Management mentions the 'Participation in the costs of construction of technical infrastructure facilities'. One can argue that the purpose of these types of improvement fees should be to co-fund the construction of local public infrastructure. Owners profiting from the construction of an access road or an underground sewer system, in most legal systems, contribute to the costs. Local governments are more concerned with their proportion of expenditures on a specific investment, for instance 50 per cent, rather than with determining how much the value of individual lots has increased.

In this interpretation, the current mechanism of improvement fee does not fully meet the criterion. The final determination of the fee may take three years from the decision to connect the real property to technical infrastructure facilities until the use of the constructed road. Therefore, the mechanism does nothing to ensure availability of investment funding during construction, when the resources are needed the most. Nor is there any point in gminas contracting financial obligations with the assumption that the income from improvement fees will be used to repay them. In this case, uncertainty of income from the fees is too high for them to constitute any security. In the United States, a practice common among local governments is to issue bonds, secured with income from owner fees, to build infrastructure.

Furthermore, income from improvement fees is not held in a separate account or an earmarked fund, but constitutes general income of the gmina. In practice income from fees does not fund any specific public infrastructure.

Most legal systems seek the simplest method to transfer part of expenditures onto real property owners, allowing for the area of their properties, the length of the lot front adjacent to the road, etc. Connecting improvement fees to the need to prove that the real property value increase has been determined correctly leads the institution down a wrong path. If any real estate had the so-called cadastral value, it would be possible to refer to that value. At present, in Poland in each case of improvement fee determination is it necessary to have a property appraisal report developed, the cost of which can amount to half of the improvement fee. The provision of Article 146 (I) (a) stipulates unambiguously that determination of the improvement fee follows obtainment of a real estate surveyor's opinion determining the value of the real property.

3.5 CONCLUSIONS: THE NEED TO REFORM IMPROVEMENT FEES

Improvement fees face serious institutional challenges in Poland. For instance, court decisions focusing on secondary matters almost entirely distort the purpose/objective of the legislation. Reform of improvement fees has become an urgent necessity. Nor would replacing the real property value increase with another fee calculation method solve the basic problems affecting the land-based fees. What is needed is a profound reform so as to establish grounds for development of the institution. Some of the areas that need improvements are hereafter proposed.

First, those concerned should consider whether the Act on Real Property Management is still the appropriate tool to regulate improvement

levies. Worth considering is the idea of developing a separate Act governing public-private partnerships (co-funding by owners particularly), profiting from the investments (e.g. an Act on infrastructural fees) or inclusion of it in the Act on taxes and local fees. Such a change will transfer management of the fees to administrative bodies specializing in public levy collection. This would also result in enabling taxation notices to be sent along with tax call letters. Provisions of the Tax Ordinance ought to apply to the fee.

Second, two participation mechanisms ought to be clearly implemented:

- civil law (property development agreement),
- public (compulsory fee).

The legislators should assume a civil law agreement priority (a developer's contribution). A developer or an owner might assign real properties to the gmina for public purposes, finance part of the investment independently or pay an amount agreed upon prior to commencing the investment. A property development agreement might not infringe upon the resolution governing framework conditions applicable to the conclusion of such agreements. Or, agreement authorization by the gmina council might be considered. The agreement should result in exemption from compulsory fees. Another consideration is the issuing of additional incentives for persons concluding such agreements, e. g. real property tax exemptions for several years. Such a regulation would provide much greater flexibility. For instance, a private developer, constructing a housing estate for several hundred families might voluntarily undertake to construct a kindergarten or a park and thus obtain exemption from tax and improvement fees.

Third, a prerequisite for effective propagation of improvement fees is the provision of local governments with much greater decision-making power with respect to that. It is not reasonable for the institution to be governed in such detail by provisions of statutory law or regulations. Gmina council competences should include responsibilities such as:

- determination of the type of local infrastructure covered by the fee,
- determination of the zones in which the fees apply,
- determination of a statutorily permitted method of fee determination,
- determination of the interest on installments and the number of installments allowed.

As part of this shift of duties onto the local government level, local governments should be provided with the ability to separate the fees from the real property value increase. The legislator, when foreseeing several methods of fee calculation, ought to provide gmina councils with freedom of choice of the fee calculation method. Still, there ought to be defined a maximum threshold of transfer onto the owners of the costs of investment realization, e.g. 50 per cent. The resolution would provide for an estimated investment realization cost and the principles of division of the amount among owners and perpetual users of real properties within the upgraded/affected area. The simplest rule would be to determine the fee based on the principle of the length of the plot front adjacent to the public road,

with owners of plots located along an internal road paying half the fee – based on the length of their plot front adjacent to the internal road. For persons of income below the average monthly remuneration, upon a request from them, the fee might be reduced on terms and conditions provided for in the Act, but not less than 50 per cent. Additionally, exemption can also be considered for those entities that are exempt from real property tax.

The fee would be levied in equal installments for a period of five years as of effective date of the resolution and should be levied along with the first real property tax installment. As exemplified by construction of public roads, such a resolution ought to graphically specify on the planning map the real property areas covered by the fee. The fee might cover real properties adjacent to the road realised as well as those for which it is the closest public road from the plot boundary and which they can drive on.

Also, adoption of a fee tariff based on the average real property values, i.e. the real property cadastral value, ought to be considered as well. Pursuant to Article 166 of the Real Property Management Act, in order to determine the land cadastral value, separated zones should be provided, due to similar factors affecting the market value, with determined unit values of land located within the zones.

Ultimately, leaving the situation in the current state will result in further stagnation in the domain of urban infrastructure development and in the application of an institution that provides the intended benefits only in a few gminas.

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04 LAND VALUE FINANCE: RESOURCES FOR PUBLIC TRANSPORT

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Abstract

Cities worldwide have been experiencing escalating growth, especially in developing countries, with often consequential negative impacts related to the increase of transport and, in particular, of car mobility. Investments in transport need to seek new paradigms to solve these problems. Urban mass transit systems are capable of providing capacity and competitive levels of service for a large proportion of urban travellers. More than other transport modes, these systems exhibit public good characteristics. Therefore, their impacts of increased accessibility, i.e. the increase in land value, can be captured and returned to the society from which the investment has been sourced. From this perspective, this chapter demonstrates the necessity to introduce land value tax mechanisms in investment programmes for urban public transport. We review how different mechanisms of land value capture (betterment tax, tax increment finance and joint development) can be integrated in order to finance urban mass transit systems.

Keywords: *land value, accessibility, urban public transport*

4.1 INTRODUCTION

Urban growth is frequently associated with a heavy reliance on the automobile as the main transport mode (Bahl and Linn, 1992), and this is especially problematic in megacities of developing countries. For instance, in low and middle-income countries where road traffic between 1990 and 2006 has more than trebled, most of the road traffic is comprised of passenger cars (World Development Indicators, 2007). Certainly the rise in car use is related to the increase in average distance traveled. Therefore, a lack of public transport accessibility impacts primarily on the urban poor, who tend to live on city peripheries, and thus are the most socially and economically marginalised in the urban context (World Bank Independent Evaluation Group, 2007).

It is interesting to observe how the use of private cars has been indirectly supported by international lenders such as the World Bank, which often influence urban planning policies in developing countries. As reported in “A Decade of Action in Transport: An Evaluation of World Bank Assistance to the Transport Sector, 1995-2005” by the World Bank Independent Evaluation Group (2007), in the modal distribution of World Bank commitments, road sector projects were predominant¹ (almost 80 per cent of the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA) portfolio of commitments for transport from 2001-2006). Moreover, taking into consideration only the urban projects, we estimated that 58 per cent were dedicated to urban roads and streets. But as reported in the same document, ‘the Bank has discouraged metro and light rail construction worldwide (with a few exceptions) in favour of more cost-effective solutions such as buses, bus priority measures, and exclusive bus-ways.’

¹ The road sector includes rural, urban and intercity projects.

However, in order to reduce automobile dependence and subsequently mitigate its direct and indirect effects such as slum settlements, pollution, congestion, crime, and inadequate services and facilities, when we examine the provision of urban transport we must take into account the full range of alternative transport services. For example, mass rapid transit provides capacity and competitive levels of service for a large proportion of urban travellers. However, although mass rapid transit systems such as metro, light rail transit and bus rapid transit systems represent innovative solutions to the urban accessibility problem, they also require large sunk investments, such as in the case of light rail transit (Polzin and Baltes, 2002; Hecker, 2003; Kennedy et al., 2005). Consequently, high cost considerations may ultimately discourage decision-makers from investing in more innovative systems as better alternatives for urban transport provision. In addition to budgetary constraints, the present financial and economic downturn has shrunk the availability of capital dedicated to public transport.

In this line, in order to overcome institutional barriers and stimulate investment in public transport as well as give confidence to investors, a conceptual shift is necessary with regard to funding mechanisms for public transport systems. The main objective of this chapter is to examine how land value related to transport investment can be used as a mechanism to finance urban transport systems. Our primary focus is to analyse how financial investment in transport can be recaptured from an increase in the value of land due to increased accessibility. In this chapter we will first review the main mechanisms of land value capture finance. In so doing, we conclude that an investment programme based on land value, especially when applied in cities, can achieve sustainable development, where more efficient use of energy is closely related to economic and social processes, and high accessibility is not merely devolved to car usage.

4.2 LAND VALUE RELATED TO PUBLIC TRANSPORT ACCESSIBILITY

The basic assumption of land value capture is to recover the capital cost of the transport investment by capturing some or all of the increments in land value resulting from the transport investment. The approach has been well documented from numerous applications around the world (for a review, see Hayashi, 1989; Anderson, 1990; Smith and Gihring, 2006; Medda, 2007).

The value of land is comprised of the capitalised value determined by the accessibility to natural and social resources in the city, and the capitalised value of improvement and construction in situ. The capitalised land value due to accessibility, upon which we focus in this analysis, consists of three components (Fensham and Gleeson, 2003): the increase in land value accruing from greater accessibility is due to access to natural amenities (urban externalities), infrastructure such as schools, hospitals and public services (social infrastructure), and to sewage collection, piped water, and highway systems (development infrastructure) (see Figure 4.1). The total land value related to urban accessibility is the aggregate value of the three capitalised land values as depicted below.

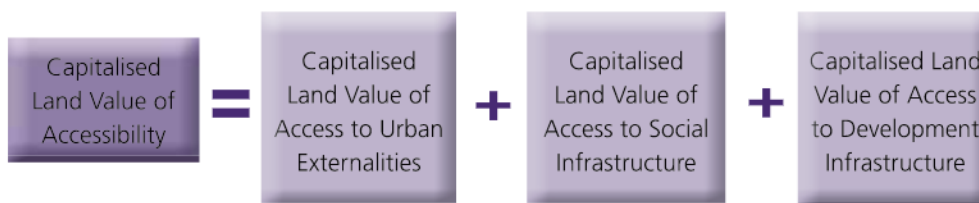
We place emphasis on the necessity to distinguish between the direct and indirect impacts that transport investments can have on different components of land value in order to minimise the possible regressive effects, for example, of a land tax.

For instance, when we consider an investment in an urban bus service, we have in this case a direct impact on the capitalised land value of access to social infrastructure, because the new bus service will increase access to social infrastructures such as schools. However, the transport service will also have indirect impacts on the other two capitalised values.

Nonetheless, our specific problem is how to identify a transport investment as either a development infrastructure or a social infrastructure (see Figure 4.1), and how to recapture the increase in land value. In the case of development infrastructure, the cost recovery for the provision is often implemented through user-charges. This straightforward revenue mechanism is based on the level of fare charged and the volume of traffic using the transport system. However, the increase in land value due to the investment in the development infrastructure is seldom recaptured.

In the case of social infrastructure the cost recovery mechanism is less explicit. Transportation as impure public good may satisfy one of two conditions: it may be non-rival in consumption or it may be non-excludable, and public transport as a social infrastructure is one such example of an impure public good. Household knowledge about public transport provision is commonly the result of past public transport experience, current availability of the transport service, and actual cost of the service, its demand and supply, as well as consumer expectation and perception of cost.

FIGURE 4.1 STRUCTURE OF THE CAPITALISED LAND VALUE OF ACCESSIBILITY



These elements altogether may create asymmetry of information about the optimal level of public transport provision, and thus of the social infrastructure provision.

Proximity to urban mass transit systems is shown in most studies to have a positive correlation to land values but not a linear one. Mass transit sometimes exhibits mixed results with respect to the impact on property values; it can induce property value premiums ranging between 3 per cent and 40 per cent for various reasons. The positive effects produced by the availability of better alternatives of travel are commute time savings, higher accessibility to the labour market, retail and cultural opportunities, and reasonable walking distance to the station. However, urban mass transit may also bring negative impacts to the property value due to an increase in negative externalities such as noise, pollution, unsightliness of the station, and crime. In Atlanta, proximity to the mass transit system has raised property values in economically-depressed areas, but has lowered property values in economically-affluent city areas; we find the reverse situation in Miami (Diaz, 1999).

In the context of the mass transit system investment, we can identify three main methods of land value capture:

1. Betterment tax is a value capture levy on property that has benefited from transport infrastructure gains.
2. Tax increment finance is an economic development incentive package.
3. Joint development mechanism is a cooperation system between public sector and private developers.

In order to minimise flaws in transport provision and design the most suitable cost recovery, it is necessary to examine the extent of the role of a mass transit system within each urban context, as either social or development infrastructure. Although the three mechanisms retain the essential idea of land value capture, the methods differ in relation to their practical applications. The following sections will examine their characteristics in detail.

4.3 BETTERMENT TAX

Financing an urban mass transit system through a tax on the land value added by public investments is the main assumption of the betterment tax, also known as benefit assessment. Betterment tax is directed towards the beneficiaries of increased accessibility, of reduced congestion and pollution, and of lower transport costs achieved due to the public transport investment. In a mass transit system such as light rail, a relevant part of the capital costs is constituted by the land acquisition. London's Crossrail is expected to raise £3.5 billion—out of the £16 billion funding needs—through a business rate supplement across the greater London area. The estimated supplement is 2 pence per British pound of rateable value, exempting the businesses with a rateable value of £50,000 or less. The objective of the betterment tax is therefore to internalise the windfall surpluses of land value due to proximity to the transport project.

For this reason, betterment tax is seen as an equitable, easily understood and efficient levy, as it seeks to recover part of the added value on private land assets resulting from the transport investment. “It is through joint community effort that land acquires worth. This is the logic on which value capture rests. Traffic volume makes for increases in land value, and that variable is social in nature. Because that value derives from social effort, society has a principled right to its claim” (Batt, 2001).

Betterment tax may also create incentives for higher density urban development because private beneficiaries are forced by the tax to avoid land speculation. This is particularly important in markets where we have high land demand pressures; the betterment tax in fact acts to lessen this pressure and readjust land prices.

There are many examples of applications of betterment taxes; of particular interest are the Hong Kong and Singapore applications for financing their respective metro systems. In both cities land value capture mechanisms are the principal sources of revenue for financing transport infrastructure and services. The betterment taxes in Hong Kong are based on full market value, whereas in Singapore the tax is about 50 per cent of the full market value. This difference is due to the decision by the Singapore government to leave some of the windfall benefit to the private sector in order to incentivise urban development. The Hong Kong applications for financing its mass transit systems are based on the land rent earned concept. The Hong Kong government leases, under different restrictions, the land in station areas to the MTR Corporation. The lease for development, which is renewable, is generally 50 years or more. The revenue of MTR Corporation, generated from non-fares, accrues to 35 per cent of their total revenue and comprises the proceeds of land rent (direct betterment value), station commercial and related businesses, such as retail and advertising sales (indirect betterment value), and other public mass transport investments. However, the main lesson to be learnt from these examples is that betterment tax is most effective in robust markets, and above all, where there exists a well-established tax administration system.

Preparing and implementing a programme of betterment taxes in order to finance mass transit systems is a complex and often elusive task. The first difficulty, as we have observed,

is the evaluation of the impacts. Although the use of the property tax around the world is widespread, especially in cities, in developing countries in particular, land registries for residential properties are often incomplete. The betterment tax can therefore appear to citizens to be inequitable due to a perception of differential treatment among citizens in relation to real benefits accrued from the transport project. Moreover, the collection of the tax may be complicated and ineffective, thus exacerbating the perception of unjust treatment which can then trigger delays of the actual use of the tax revenue for a transport investment.

In some cases the betterment tax may also induce displacement from an urban area affected by a transport project because certain residents may be asset-rich but cash-poor. For instance, in Colombia, where the betterment tax system was introduced in 1921, Jaramillo (2000) states that 'when the mechanism was functioning better, municipal authorities tended to favour it as a source of financing for public works in areas where the landowners' ability to pay the levy was greater so that fewer protests could be expected. As a result, local authorities tended to undertake public works projects that benefited those who were able to pay the levy and neglected other socioeconomic sectors, thus reproducing and strongly increasing socio-spatial segregation.'

From this perspective, the intervention of the private sector may represent a solution. The Local Government Act (2003) in England and the Scottish Executive Act (2003) are currently promoting the concept of Business Improvement Districts (BIDs) as a form of land value capture. A BID is an example of tax-based approaches in order to develop urban areas. The BID is an added tax or fee on all the properties and businesses with respect to a specific area. The peculiar and innovative character of BID is that property owners and businesses self-impose this local

tax in order to provide a level of service above that provided by the local authority (Lloyd et al., 2003). This type of BID is also common in the United States and often incorporates investment to improve transport services. The Portland Pioneer Square BID is one example of this practice.

The bus rapid transit system in Ahmedabad, a low-income city, has experienced great difficulty in reaching profitability; in this case the operators are exploring how to obtain additional financial resources through the implementation of a betterment tax targeted to commercial and office landowners which will be earmarked for the bus rapid transit system. Therefore, the indirect intervention of the private sector through the targeting of betterment taxes to business and commercial activities can represent a feasible alternative for ensuring financial support for transport investments.

4.4 TAX INCREMENT FINANCE

Tax increment finance (TIF) is a private-public financing tool used mainly in urban redevelopment projects and transport investments. The basic idea of this financial tool is that public improvement expenditures induce growth in urban areas identified as blighted, and that the property taxes of the manifested urban growth are used to recover the development costs. Private investors are therefore encouraged to invest in TIF-designated areas because they are assured that their taxes will finance the development of the area, thus providing a net financial gain. Tax increment finance is mainly applied in the U.S. where it was initially developed in 1951. The interrelation between the public investment, in particular investment in an urban mass transit system, and the increase in property value, as in the betterment tax case, is a fundamental requisite. The TIF programme is thus a self-financing mechanism based on the local government decision to operate in a

joint venture with the private sector to develop an urban area. The literature (Klemaski, 1989; Selby and Hunter, 2004) provides various applications and in particular the conditions to verify the effectiveness of the programme. TIF projects must not only generate a level of tax revenue at least equal to the cost of the project, but they must also be economically efficient in that: 'projects with a positive net present value are more beneficial when the municipal tax rate is higher, in spite of the reduced relative subsidy from the overlying government' (Dye and Sundberg, 1998).

Tax increment finance mechanisms operate either through fiscal incentives such as tax relief and tax breaks or through tax disincentives in order to encourage urban development. The public sector usually uses a variety of financing devices and tools to raise capital, such as general bond obligations or the 'pay as you go' approach, in which the tax increment is collected each year and is accumulated until the project can be financed. In developing countries similar tax mechanisms have been used, especially through informal partnerships, and they operate according to a perceived mutual interest. Many global examples can be mentioned, such as land pooling and land readjustment in Southeast Asian countries, the Slum Redevelopment through Incentives in India, and in Cameroon, Guinea and Rwanda the 'Schéma d'aménagement', where the public sector intervenes in road schemes before the land is subdivided and sold (Calvo, 1998).

Approximately 30 per cent of the Chicago city area consists of 130 TIF districts. Arlington Heights, a Chicago suburb, rebuilt its downtown around the commuter rail station – with very high densities – using TIF as an infrastructure funding source. The number of residents in Arlington Heights has increased by 10-fold to 1,500 – from 150 in 1985 – and the assessed value of property has jumped seven-fold. The agreement between local authority

and developer includes a provision reducing the former's investment if the latter's rate of return exceeds a certain target. However, because it has an impact on local government district financing, such as for schools, TIF is highly controversial. In general TIFs in Illinois have had a lifespan of approximately 23 years; during this period the most contentious aspect of this type of land value capture is how TIF finances redevelopment by increasing the taxes. According to Quigley (2007), if TIF captures approximately 40 per cent of the tax base, then TIF districts will have a lower tax base, and thus a higher tax rate in relation to taxing districts without TIFs. Each of the seven local governments has its own TIF zone. He observes that approximately 40 per cent of the incremental property value of these districts would have taken place even without TIF, so the tax rate should actually return the 40 per cent of the incremental property value. Therefore, 'every taxpayer in Chicago – whether he or she lives within a TIF – pays the TIF tax' (Quigley, 2007).

The development by the private sector through concessions and tax relief mechanisms of specific hubs of the public transport network is a successful example of an applied TIF scheme. Large stations with a high level of traffic represent a clear opportunity for commercial and business property development. In Brazil, Belo Horizonte and Porto Alegre, which are transfer stations of their respective BRT systems, have been developed under TIF. Another possible alternative of TIF transport application involves the upgrade of the zone classification along the corridors of the mass transit. In Curitiba this action affecting the zoning system has, however, produced various negative impacts such as speculative processes of land development and the displacement of low-income residents in the urban peripheries.

When we look at the tax increment finance programme, it is often very effective in addressing the interest of the private investor through fiscal incentives, but it sometimes overlooks, and thus negatively impacts upon, the greater urban area, above all on the most vulnerable residents and services of the community. According to Payne (2003), 'informal partnerships appear to have been operating at a large scale and are more successful in serving the needs of the poor.' This success is mainly related to the ability of the public sector to operate outside the often too-stringent and cumbersome regulatory frameworks, and thus be able to respond adequately to local pressures without the need for new policies or regulations. In both cases of formal and informal partnership, the common element of the TIF mechanism is to promote private investment through tax mechanisms such as capital allowances, and to respond mainly to the local context and needs with a strong decentralised approach to fiscal measures.

4.5 JOINT DEVELOPMENT PROJECTS

In a joint development project a local authority or government, in order to finance and maximise the profitability of its investment in public transport, particularly in transit systems, encourages property development (residential and/or commercial) close to stations. As described in Cervero et al. (2004), 'joint development at transit stations includes air-rights development, ground-lease arrangements, station interface or connection-fee programmes, and other initiatives that promote real-estate development at or near transit stations to the mutual benefit of public and private interests.' In the United States, several joint development projects are found within a Transit-Oriented Development, a pedestrian-friendly and transit supportive development or redevelopment (Boarnet and Crane, 1998; Cervero et al., 2004).

The advantage of using joint development is that it is not necessary to identify the direct and indirect impacts of the transport investment, as must be done in the betterment tax or the tax increment financing, because there is cooperation between the public agency and the private developers who share construction costs (Doherty, 2005). In a joint development project developers and public investors both benefit, so it is also referred to as a win-win situation (Transportation Research Board, 2002). The private developer will benefit from better accessibility and more potential customers (higher rents or greater occupancy of residential projects). The public sector will benefit through the sharing of construction costs.

The business and commercial opportunities arising from land value increase are often capitalised by the public sector by leasing sites within the transport infrastructure, e.g. underground commercial activities and advertising. Leasing, rather than sale, gives public authorities the flexibility sometimes necessary in the operation and planning of urban rapid transit systems, but also provides an annual stream of revenue often fundamental to the financial feasibility of the transport investment, as in the Bangkok BTS Skytrain. One of the most well-known and innovative examples of urban rapid transit property development is the Mater Hill station of the BRT system in Brisbane, where a hospital has been built on top of the bus transfer station. In this case commercial activity is seen not only as an opportunity for the private sector, and thus a source of revenue for the urban rapid transit system, but also as a public service in which individuals can use the transfer time in the station for other routine activities, such as grocery shopping. Such a view, however, is not shared by all authorities. For instance, the mayor of Bogota did not allow any commercial activity in the Transmilenio network (phase 1) 'for fear of degrading the image of the system with litter and advertising' (ITDP, 2007).

However, in some projects we observe that the lease and revenue often accrue only a small percentage of the total revenue of the mass transit system. For example, in Washington (USA) the revenue through joint development of WMATA between 1979 and 1989 has amounted to less than 0.7 per cent of the annual revenue. These modest results may be due, on the one hand, to the mass transit operators' limited experience regarding land value estimation, and on the other hand, to their unwillingness to engage in real estate and other business pursuits apart from the operation of the transport system.

Nevertheless, the joint development mechanism is the most easily applicable in a private sector agreement because it is technically straightforward to implement in the contractual agreement, and also because by not using taxation mechanisms, it does not raise equity issues.

4.6 CONCLUSION: POLICY OUTLOOK

In order to address the problem of environmental and social externalities such as pollution, slum formation and congestion due to the predominance of car usage, investment in more sustainable transport systems such as mass rapid transit, are timely and necessary. However, city governments, especially in developing countries, have difficulty finding efficient ways of financing urban transport.

In this context the role of land value finance mechanisms can therefore be seen as a robust financial tool for minimising volatility during economic crises, and as a source of public transport funding under different methods of implementation. The importance of land value finance is based on the concept that public transport and land development planning must forge closer ties so that societies may reach higher levels of mobility in economic, social and environmentally sustainable ways.

From our analysis we find that the value of increased accessibility is not always directly related to higher property values. Hedonic rent studies have shown a wide range of findings on the relationship between transport accessibility and nearby property values (for a review, see Smith and Gihring, 2006; Medda, 2007). In order to introduce land value mechanisms it is necessary to clearly understand the profitability of the transport system. Two relevant points need to be addressed: the contextual element, that is, what city and what type of public transport investments are we considering, and crucially, to know the economic relationship between the life cycle of the public transport system and the property market.

We have reviewed three main land value capture mechanisms in relation to public transport investment. Betterment tax, tax increment finance and joint development are the methods based on recapturing some of the capital costs of the transport investment. They can be implemented in combination according to the urban context. Medda (2009) argues that public transport and, in particular public transport accessibility, should be evaluated as a merit good. The concept of accessibility as a merit good is based on the idea that for example, an investment in roads and an investment in urban rail, although they both increase access to the various facets and activities of our lives, each has a different accessibility emphasis.

‘Pay as you go’ taxation generally cannot recapture the increase in land value due to the transport investment, but with the definition of a new land finance mechanism based on accessibility, we can recapture the increase in land value due to the transport investment, and we can also design a financial tool that can influence household behaviour. The implication here is that city authorities want to prioritise public transport and will promote a proactive transport policy approach.

Transport operators, particularly if they are private or under public and private partnership agreements (e.g. BOT), need to align their objectives with those of city authorities. Political decision-makers must know the extent to which the community is willing to pay for a less congested, polluted and noisy city served by sustainable public transport so that they can correctly allocate the risks with the transport operator, and above all define an equitable and transparent land value finance mechanism.

The main potential benefit of the tools of land value capture finance for public transport investment is their flexibility in adapting the structure of incentives and risk-sharing to the features of a project and to the economic and institutional environment. But it is precisely due to the flexibility of land value capture tools that it may be unwise to seek a standardised model that can be easily replicated across cities and countries. The public sector has to consider a variety of options before making a decision, and in practice must make a judgment on the trade-offs between the various and sometimes conflicting objectives. Therefore, it is particularly important to develop research that determines impartial and objective tools for evaluating the most efficient and sustainable ways to finance public transport investments. In conclusion, policies that encourage decentralised financing and implementation of public transport may allow for a better response to city needs by bringing more flexible tools and alternative forms of tax incentives to the fore so that the poorest areas of the city can be developed. ‘This attention to detail at the community scale, while concurrently planning major transportation corridors, lies at the heart of successful integrated land-use transportation planning’ (Kennedy et al., 2005).

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05 ETHICAL IMPLICATIONS OF LAND VALUE TAXATION

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Abstract

After a broad description of land value taxation and claims made about its efficacy, in making housing more affordable, public infrastructure cheaper to construct, and recessions less severe, this chapter summarises the fortunes of land value taxation in Australia and New Zealand since its introduction there at the turn of the 20th Century. It is argued that its relative decline since 1970 can be traced to the fact that investors see it as reducing their returns from property. This is especially true where, as in Australia and New Zealand, there is periodically quite pronounced property speculation. Since there is this competition between private landowners and government for possession of land value the question follows as to whether land values are private or public property. Here it is argued that land rent or land values arise overwhelmingly from differential natural and social advantages to land, factors that cannot be ascribed to individuals. Land value taxation has thus an important underpinning in ethics. It is also suggested that equity is the foundation of good taxation. Equity is also argued to be the foundation of social justice. Here, Henry George added a further ethical dimension to land value taxation when he argued that its full application (as a 'single tax') gave equal rights in the use of privatised land. Despite what may be said in favour of land value taxation as a fiscal reform, it is argued that, ultimately, the progress of land value taxation must involve not only fiscal but moral argument.

Keywords: *land value taxation, local rates, property speculation, housing affordability, land price and land value, land rent, Henry George.*

5.1 INTRODUCTION

Land value taxation (LVT) does not deal with the taxation of land but the taxation of land values. In this context of recent world economic recession, it is interesting to consider that the American reformer and economist Henry George (Henry George, 1979), who popularised this concept of land value taxation towards the end of the 19th Century, considered land value taxation to be the remedy for recession.¹

There are two basic facts about land value taxation that make it worthy of serious examination as a tax. One is that land cannot be moved. The other is that land is finite. These two facts mean that it is difficult to escape and that it is difficult to shift onto someone else. The most superficial knowledge of taxation shows that it is not a claim that many other forms of taxation can make.

5.2 LAND VALUE TAXATION AS A FISCAL MEASURE

There are some merits in land value taxation as a fiscal measure. Land value taxation or a charge on the economic rent of land is a 'big' tax; it can generate sizeable revenue to local and central governments. One of the key arguments in this chapter is that the more land value taxation is applied the greater its benefits become. That is quite different to other taxes.

Taxes are normally used to discourage activities. And the more taxes such as income tax and consumption tax are applied the more destructive are their effects. Clearly, the higher income tax is, the more it discourages earning an income; and the higher consumption tax is the more it discourages spending.

¹ See especially Book V of *Progress and Poverty*. A short account of George's basic views may be found in Pt. I Chs. IV and V of *A Perplexed Philosopher*.

This chapter also argues that there is a certain naturalness about land value taxation. It is a revenue generated by the presence and the activities of the community. And the more it is used to support the activities of the community, in the form of public infrastructure such as the provision of water, electricity, telecommunications, hospitals, schools, and recreational facilities, the more land values are enhanced. In other words, its application enhances its tax base. That cannot be said of any other tax. Income tax does not necessarily increase incomes. Consumption tax does not necessarily increase consumption. Payroll tax does not make higher payrolls.

Land value taxation tends to ensure the use of valuable land. This is not hard to see in that it is a holding charge on land. One has to pay to keep vacant or neglected land idle. What are called "land banks" become harder to maintain. This increased supply of land must in itself tend to make land cheaper. This easier access to land encourages useful economic activity. In a context where government takes land values rather than individual profit-takers, land value taxation discourages those who simply buy property to capture its increasing value. That in itself reduces the demand for land and is another reason why it reduces land price. In other words, land value taxation can act as a brake on increasing land prices.

5.2.1 Land taxation and Conflicting Interests

A crucial point to note here is that, if there is land value taxation, there are two bodies vying for land values. These are the government and landowners. Now, if by land value taxation government takes more of this land value, landowners have less of it to sell. That reduces land price. Whereas this is not what the investor wants, this has obvious benefits for those who want to buy houses. Mortgages can become smaller. And the smaller mortgages attract less interest charges.

Finally, if public revenue remains the same, more revenue from land values will mean less revenue from other taxes. Thus, those who want homes will pay less in other taxes, taxes that before would have added to constructing and furnishing the house for example.

However, one should not forget the larger public benefits of cheaper land. Land becomes cheaper to acquire for necessary infrastructure and services. At present, the cost of land is a huge obstacle confronting the building of new urban railways and highways, and more schools and hospitals. In Australia this is undoubtedly one factor in the delay or even cancellation of projected railways and roads. The result is unnecessary urban congestion. For instance, poorly developed public transport and new or widened highways to outer suburbs make the land of inner suburbs more in demand and thus more expensive. It encourages highrise development to capture this 'land rent'. A land value taxation policy tends to discourage urban sprawl because, by putting a higher holding cost on valuable land that is vacant or underused, it tends to bring such land into fuller use.

5.2.2 Land Price Initiates Recession

All this seems to make good sense. Ignoring this good sense may have contributed to the housing and economic downturn experiences in 2008-2010. Its initiating cause has been generally accepted to be sub-prime mortgages in the USA, mortgages given by ignoring prudent lending principles, mortgages sold to persons incapable of repaying them, mortgages sold with near to or zero deposit, mortgages then turned into securities and sold all over the world. Australia was caught up in this activity. This upsurge in lending increased interest rates. And those increasing interest charges often made untenable other mortgages held by more credit-worthy borrowers.

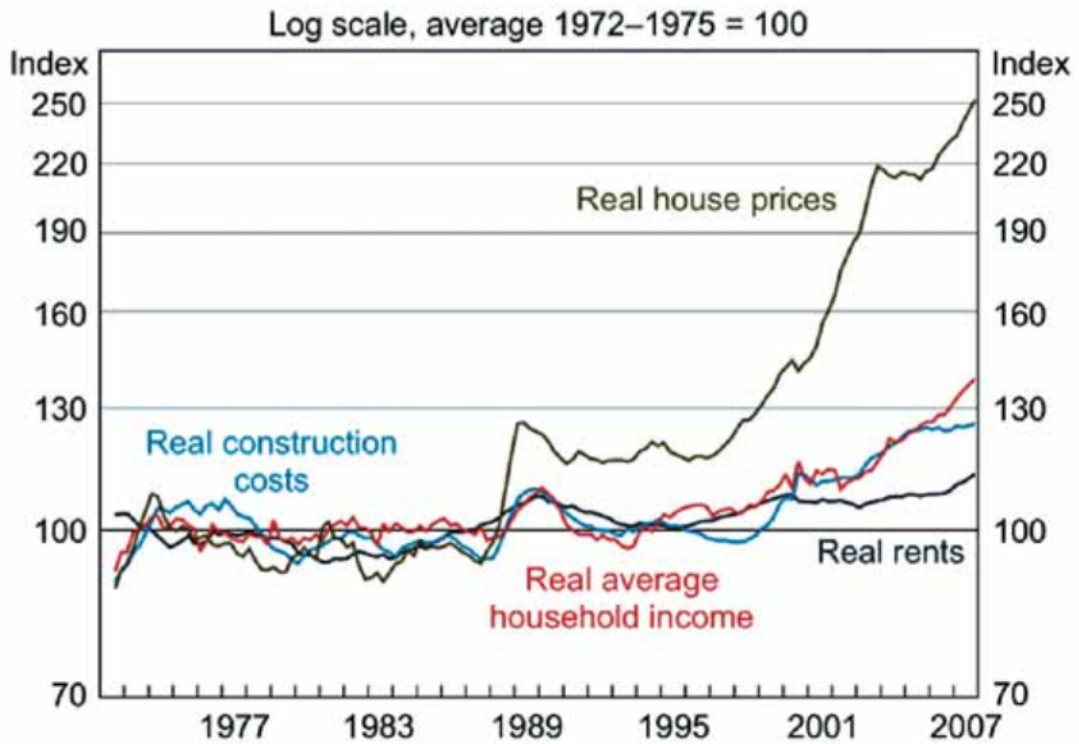
Evidence of the plight of mortgagors in Australia is the fact that in 2007 borrowers needed 36.2 per cent of, usually, two incomes to meet the average loan payments (REIA, 2009).

In Australia residential house prices did not come down after the 1990s recession. They just did not go up. Between 1995 and 2005 house prices doubled. In that year, the OECD dubbed Australian housing the most over-valued in the world, 52 per cent higher than was justified by rental values (Colebatch and Topsfield, 2005). In 2009 the median price of a home in Sydney in Australian dollars was nearly A\$600,000 and, once again, there has been no perceptible fall in house prices in Australia, though they have fallen about 9 per cent in New Zealand.

As indicated above, land value taxation tends to put a brake on increasing land prices. What happens to land prices without that brake is illustrated during the period of 1990 and 2008. Recovery after 1990 brought a greater demand for land and enhanced benefits to land. In other words, land prices quite naturally increased as a measure of demand and these increasing benefits.

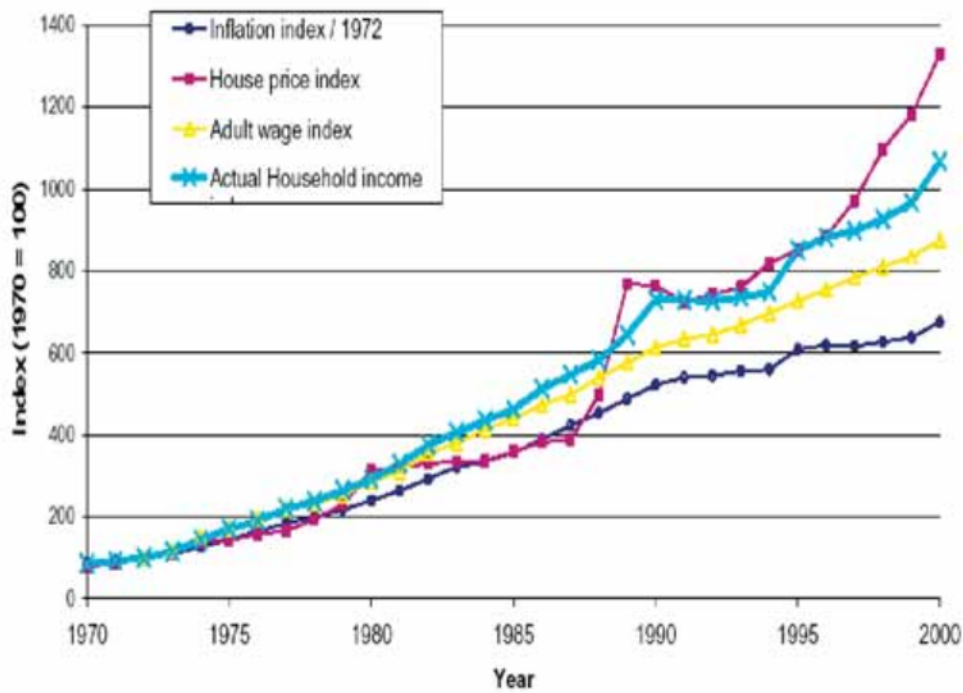
However, availability of land did not expand. As it is often observed, unlike other things, the greater demand for land does not often increase its supply. This is because increasing price tends to increase expectations about its price going even higher. This relative scarcity adds a general scarcity price to land. Then, the speculative phase tends to send prices still higher (Anderson, 2008). The following Figures 5.1 and 5.2 provide evidence of this. They also show a growing gap between what are called "real house prices" and incomes. In other words, they are evidence of housing unaffordability.

FIGURE 5.1 REAL HOUSE PRICES AND FUNDAMENTALS



Source: Kavanagh (2009)

FIGURE 5.2 HOUSE PRICES, WAGE AND INFLATION OVER TIME



It can be argued that the initiating cause of recessions is rapidly rising land prices that eventually produce some significant reduction in housing and other construction. In response, land value taxation, by putting a brake on this rising price of land, can help to ward off recessions.

5.2.3 Analysis hindered by terminology

This kind of analysis of economic events is obstructed by how terms and concepts are used and misused. For instance, when referring to housing unaffordability, as the graphs suggest, one should actually mean land unaffordability. Similarly, instead of saying 'house prices', we should be saying 'land prices'. Asset inflation, as it is often referred to, is clearly rising land prices. Land speculation is commonly known as asset inflation. Indeed, instead of a land price crisis the common terminology is financial crisis.

What does all this mean? It means that all over the developed world, many who want to own a home are being denied the opportunity by the increasing price of land. In Australia for example, the number of first-home buyers declined as land prices rose. From approximately 25 per cent in Australia in 1997, first-home buyers made up only 16.7 per cent of total homes purchased in 2007 (REIA, 2009). It is now commonplace in Australia to hear young people saying they will never own a home. In the meantime all over the developed world the housing construction industry is languishing. Media reported more than eight million foreclosures in the USA at the height of the economic downturn in 2009. Yet in searching for these statistics one finds instead that property speculators throughout the world are already preying upon these foreclosures, or what Australians call 'fire sales'.

There was a time when the kind of analysis given here was far more common than it is today. Around the turn of the 20th Century, thanks in part to Henry George and his followers, land value taxation became a political issue especially in Britain and those new countries settled by the British such as Canada, New Zealand, South Africa and Australia.

5.3 LAND TAX AND LOCAL RATING IN AUSTRALIA AND NEW ZEALAND

Thanks in part to those efforts land value taxation had a promising start in both Australia and New Zealand. In these countries, it occurred in two forms, as land tax and as local rates. But, despite its promising beginning, one would have to say that both these revenues have fared badly, especially since 1970.

5.3.1 Land tax

The Commonwealth Government of Australia was formed in 1901 as a federation out of six British colonies – New South Wales, Victoria, Queensland, Western Australia, South Australia and Tasmania. (New Zealand, after initial interest, declined to federate). In 1913 the Australian Capital Territory was formed to house the Commonwealth Parliament. The Commonwealth adopted a land tax in 1910, albeit mainly set so as to eliminate the largest land holdings – something it did not fully achieve. In 1952 the federal government transferred land tax to the six states. Here, set about in every state by numerous exemptions, differential rates, and large thresholds, its revenue now comes mainly from the Central Business Districts in the major cities. The total revenue collected by the federal government in 2007 was A\$262 billion, whereas about A\$20 billion came from both land tax and local rates set on land values.

There are of course other taxes that carry some element of taxation of land values. Principally, there is Stamp Duty on the transfer of property.

This tax in New South Wales for instance collects twice as much as land tax (IPART, 2008). There is also sometimes special taxes such as the Metropolitan and Regional Improvement Tax in Western Australia that acts as a second land tax in that state.

Any proper assessment of the merits of land value taxation is hampered by its disfiguring exemptions, differential rates, and thresholds. For example, in Australia one's principal place of residence and all primary producing land are exempt, producing complaints about inequity (IPART, 2008). Indeed, recently thresholds have tended to be increased to compensate for higher land prices. In other words, any assessment of the fiscal merits of land value taxation more reflects what politicians have done to it rather than its true value.

In 2008, land tax in New South Wales was examined in a more general way by the government Review of State Taxation. The criteria used were of efficiency, equity, robustness, transparency, and simplicity. Land tax was ranked third among the eight taxes examined and below payroll tax, a tax

on the employment of labour. It was ranked only equal to taxes on gambling. A uniform land tax on all valuable land would doubtless present it in a more favourable light.

Table 5.1 gives recent land tax revenues in the various states. They show state land tax collection to be small when compared with overall federal government revenue, only 0.57 per cent in fact.

Like Australia, New Zealand land tax and local rates began promisingly but, since 1970, they have fared worse than in Australia. This is especially the case with land tax. Land tax was adopted in 1891 and until the 1920s collected about 10 per cent of revenue. However, by 1990 land tax contribution had been reduced to less than half a per cent of revenue. Then, as in England, land tax was abandoned completely.

5.3.2 Local rates

Perhaps more important than land tax has been local rating. In the early 20th Century local rating on land value exclusively became

TABLE 5.1 LAND TAX REVENUES IN VARIOUS STATES IN AUSTRALIA (2007-2008)

STATE	LAND TAX COLLECTED 2007-2008
New South Wales	\$1.968b.
Victoria	\$770m.
Queensland	\$1.067b.
Western Australia*	\$563m.
South Australia	\$121.7m.
Tasmania	\$90m.
TOTAL	\$4.583b.

*Includes Metropolitan, Regional Improvement

the staple revenue of local government in New South Wales (1906) and in Queensland (1902). Other states more often adopted manifold rating systems set upon the full capital or property value, or on the annual rental value of property. In 2007, some \$9 billion was collected from local rates in Australia, that is, about one-third of local government revenue (ALGA, 2009).

However, since the 1970s the land value component of rates has been variously eroded. In 1976, the federal government began to make financial assistance grants to local governments from income tax. In 2007 these grants amounted to \$2.25 billion. That assistance made it possible for local councils to “peg” or cap their rate increases. In New South Wales this began as early as 1977. In Australia, rate-pegging reduced locally generated revenue and led to an enthusiasm for user-pays charges. In the most populous state of New South Wales, a reform of rating in 1993 permitted up to one half of rates to be collected by a uniform charge on households called a “base amount” – something very close to a poll or capitation tax. The rationale for this was that each household used roughly the same services and should therefore all pay the same rate.

User-pays revenue now accounts for about one-third of all local government revenue in the 608 councils in Australia. Because rate notices in Australia are a compilation of rates (only some of which stem from land value) and a multitude of user-pays charges, it may be true that now such user-pays charges collect more local government revenue than LVT.

As in Australia, local rating on land values was also used extensively in New Zealand. By 1986, voters in New Zealand had chosen site value or LVT rating in 90 per cent of local government areas, accounting for 80 per cent of local government revenue. Local rating still collects 60 per cent of local revenue from

rating despite concerted efforts since 1996 by the Labour Government to convert local revenue to user-pays charges. However, as in Australia, a general uniform household charge, capital value rating and rates set upon annual rental values have supplanted site value rating in many local government areas.

5.4 PROPERTY SPECULATION IN AUSTRALIA AND NEW ZEALAND

Considering that from all accounts, few in Australia or New Zealand were dissatisfied with local rating before 1990, the relatively sudden displacement of land value based revenues by uniform household charges and user-pays charges must seem a little strange.

Since the initial enthusiasm for user-pays charges coincided with land speculation in the latter 1980s, it is plausible to suggest that the falling incidence of land value taxation since c.1990 has been in part due to the preference of investors for user-pays charges. The recent but now concluded upsurge in property values since 2001 led to increased land tax assessments. These have provoked concerted resistance by the property lobby in the form of media campaigns, letters to politicians and the press, and public meetings. As already said, most state governments have responded to this pressure by increasing thresholds at which land tax applies.

5.4.1 Demographia reports

Annual statistics produced by the organization Demographia suggest that Australia and New Zealand are at the forefront of property investment. Demographia now surveys 265 metropolitan property markets in six comparable English-speaking countries: Australia, New Zealand, the United States, the Republic of Ireland, the United Kingdom and Canada. In 2007 it showed that more than half of Australia’s capital cities fell among the twenty-five most unaffordable housing

markets. Near the top of the list is Sydney, where the median housing price was 8.5 times the median household income, (and where the vast majority of households have two incomes). Two years later in 2009 Sydney was even closer to the top of the list, though its housing unaffordability was now exceeded by Southern Queensland. In fact, the Sunshine Coast (a favourite of property speculators) stood right at the top! Interestingly, Queensland is considered by most to have the lowest incidence of land tax among the states (Nine Money, 2009). Commenting on its present data, Demographia concluded “Future generations would pay far more for housing than in the past, and Australia’s relative standard of living would decline” (2009, p.12).

Despite its small size a similar picture exists for New Zealand. In New Zealand, seven of the eight markets surveyed in 2009 were classified as “severely unaffordable.”² As has been pointed out, there is no land tax in New Zealand. There is no Stamp duty on property conveyancing or capital gains tax. Severely unaffordable markets include all the provincial capitals and the most desirable coastal regions such as Hawkes Bay. In all six countries, of the 64 housing markets with “severely unaffordable” prices, 28 were in Australia and New Zealand.

The surge in land prices in Queensland on the Sunshine Coast (median house price 9.6 times median household income) and the nearby Gold Coast (8.7 per cent) and in the Tauranga Bay of Plenty area (6.6 per cent) in New Zealand reflects the enormous amount of property speculation that has occurred since 2001.

It is interesting to note that Demographia reported (Demographia, 2009, p.20) that there was a strong tendency for markets with

² “Severely unaffordable” refers to those housing markets where the median price of property exceeds the median household income by a multiple greater than 5.1. Demographia figures reported in 2009 came from the previous year.

severe or serious housing unaffordability to be areas with restrictive building regulations. Its authors concluded that restrictive building regulations caused housing unaffordability. The weakness in that argument is that the strongest growth of property prices has tended to be in already established areas, where there is comparatively little new development, rather than on fringes of cities. But one could suggest that research may show that restrictive building regulations often come from the desire to protect or enhance existing property values.

5.4.2 Institutional bias

Despite the fact that rising land prices and interest rates since 2001 tended to drive first homeowners and poorer home buyers from the market, the media uniformly greeted rising property prices during that period in Australia with enthusiasm. It is evidence of the institutional bias toward investors. Clearly, much of what we have examined so far is also evidence of this, and of the ongoing (though little discussed) competition for the possession of land values. It is a conflict that must raise the question whether land values are properly a private or a public source of revenue.

5.5 THE CONCEPT OF RENT

Economists are not in the habit of giving protracted consideration to ethics just as generals are not in the habit of giving serious consideration to the ethics of warfare. To them war is a science. And so it tends to be with economists.

Economists regard economics as a science. But having discovered the principles of this science, their application must be guided by ethics. This is the case with the principle of rent popularised among economists in the early 19th Century by David Ricardo. The inescapable conclusion for Ricardo was that land rent or land values issued from differential advantages of fertility.

Henry George in the so-called Savannah Story (1879, Bk IV, Ch.2) expanded the concept to include the differential advantages coming from community development. George concluded that, as such, land rent was rightly a public revenue. Several classical economists including the Mills (James and John Stuart) agreed with him. However, George's attempt to popularise that view made him then, and now, a controversial figure.

George went on even further to argue that a 'single tax' on land values gave everyone an equal right in valuable land. Since land varied in value, a tax on its rent would reduce all landholders to the same level. They would now all hold merely the marginal worth of land. That, according to Ricardo, had no price at all.

Of the three factors in current land values, scarcity, speculative activity, and community development, the latter is of primary importance for it is what usually gives rise to speculation and scarcity. It was George's view that as cooperation rather than individual effort became more important to production, land values (reflecting that cooperative effort) would grow faster than personal incomes. He looked on this growing disparity as a source of increasing inequality. As we have already seen, some researchers such as Bryan Kavanagh (Kavanagh, 2009) and Dr. Garrick Small (Small, 2008) have produced evidence confirming this widening gap between incomes and land prices.

If this trend continues, it does not presage well for the future of our societies. Projected into the future it means that the largest value in our communities' land values will be owned by an ever smaller number; including those who own the most valuable urban land and richest natural resources. The rest will be their tenants.

Some hearing this may conclude that, if land prices rise faster than incomes, we are in a hopeless situation already. But this problem disappears if land price is destroyed. And that of course is what land value taxation tends to do. Land value though remains since people will still pay for better locations. Even without legislation any growing acceptance by public opinion of land value taxation will reduce the selling price of land since land price is fed from the expectation of increasing gains. Such acceptance will tend to turn land price into an annual land value.

5.6. LAND VALUE TAXATION AND EQUITY

In Australia especially, this greater relative expense of land is already reducing the level of home ownership, creating smaller building blocks and an increasing tendency to remain in home units and apartments, instead of moving into houses. Restrictive building codes in more settled areas are forcing the building of these units and apartments further out toward the outer fringes of cities where social amenities are marginal. Land value taxation would presumably contribute to addressing these issues.

The adage that 'what is right is wise' suggests that the primary canon or maxim of taxation is equity. This adage suggests that the efficiency of a tax, the simplicity of the whole tax system, and its certainty and convenience ultimately depend upon its equity. At the moment public opinion in Australia and New Zealand sees land values as private wealth. And, since land tax is still an annual payment, its payment is unpopular with investors. Moreover, economic arguments are placed before the public to imply that land tax is dangerous to housing construction and first-home buyers. Such arguments may not persuade the many economists who see the benefit of some kind of land value taxation but they provide an ethical support for self-interest.

In other words, like other great questions such as slavery, the progress of land value taxation must ultimately become a moral question. That moral argument must involve both the issue of the equal right to exist on this planet and the consequences of continuing to hold land values as private property, a part of private wealth.

5.7 CONCLUSION

Finally, it is interesting to consider J.S. Mill's (Mill, 1848) treatment of this same question. He writes (Bk V, Ch 1): "But is there nothing recognised as property except what has been produced? Is there not the earth itself, its forests and waters, and all other natural riches, above and below the surface? These are the inheritances of the human race and there must be regulations for the common enjoyment of it.

No function of government is less optional than the regulation of these things, or more completely involved in the idea of civilised society." Land value taxation is an important part of that regulation.

However, that is not to say that the social justice (or equal rights) aspect of land value taxation will be immediately appreciated. There is a saying that seems to suggest the following: "The obscure we see eventually. The completely obvious, it seems, takes longer." Clarence Darrow added that "the 'single tax' is so simple, so fundamental, and so easy to carry into effect that I have no doubt it will be about the last reform the world will ever get" (Earthsharing, 2006). That just may be true but it is good to see a start being made to seriously examine such concepts at an international conference such the Warsaw Conference on land and property taxation (2009).

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SECTION 2

EXPERIENCES and PRACTICES

06 POLICY GUIDELINES ON LAND AND REAL ESTATE TAXATION

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Abstract

The purpose of this chapter is to present some of the findings and underlying principles of the recent publications of the Working Party on Land Administration (WPLA) as they relate to legislation on taxation, the sustainability of land administration systems and their potential impact on the budget of the public sector of Member States. As noted that in the Working Party on Land Administration document Social and Economic Benefits of Good Land Administration, one of the essential features of maintaining national land records is to enable national governments to establish an efficient and equitable basis for raising taxes from those who own or occupy land and property. Such systems generate public income to provide essential public services for the benefit of the community. One of the key messages from the European experiences is that maintaining up-to-date information on land use and the attributes of land for all individual land parcels contributes to a better assessment of the value of land, and creates also positive externalities in the management of agriculture and the environment. It is proposed here that when land use and valuation information become integrated, the land administration system can contribute to sound decision-making and, in consequence, to improved welfare for the populations concerned.

Keywords: *Land administration, taxation, mass valuation, real estate markets, housing finance systems.*

6.1 INTRODUCTION

Over the last ten years, the United Nations Economic Commission for Europe (UNECE) Working Party on Land Administration has developed several tools to address the most pressing challenges to land administration institutions in the region, shaping significantly the policy design at the national level.

The UNECE was the first international organization which defined and addressed the issue of land administration in Europe in a comprehensive manner by setting up in 1996 the Meeting of Officials on Land Administration (MOLA), which was in 1999 converted into the Working Party on Land Administration. The Working Party aims at promoting improved immovable property administration through security of tenure, establishment of transparent real estate markets in countries in transition and modernization of land registration systems in advanced industrialised economies. As a result of its work, the Working Party has gained extensive experience the promotion of modern land registration systems in the ECE region. It has also developed into an effective network of land administration officials in Europe and North America. Since its foundation, a number of workshops, meetings with donors and lending organizations were organized and guidelines and policy papers were prepared. The Working Party also operates by sending independent expert missions to the UNECE countries to provide policy advice and recommendations on national programmes on land market development and real estate registration, which have been compiled in policy briefings (the Land Administration Review). These activities were implemented in response to a high demand for policy advice from the ECE member states.

6.2 THE ROLE OF MASS VALUATION FOR TAXATION

Amongst the earliest activities that were undertaken according to its programme of work (2000 – 2001), the Working Party prepared a study on land (real estate) mass valuation systems for taxation purposes that exist in the UNECE region. A questionnaire was first circulated among all relevant authorities in the countries of the UNECE region. The objective of the study was to achieve a better understanding of the current legislation and practices on mass valuation of land and real estate for taxation purposes and to facilitate professional contacts between officials who are responsible for mass valuation in their respective countries. The findings of the research were expected to provide governments and local administrators as well as representatives of the real estate valuation community with summarised data on what legal and practical approaches are used in the UNECE region to perform mass valuation of real estate for taxation purposes.

After responses were collected, a study was prepared, which evaluated answers to thirty-five questions. According to the results obtained, several findings on existing practices were included in a report.¹

Land or real estate systems of mass valuation operate in the UNECE region either as a part of land administration system or as a part of fiscal systems that are using land cadastre data for taxation and other purposes. The need for mass valuation is linked to the governments' needs to apply property tax. Because taxation requires that a large number of properties be

¹ *The Study Report Land (Real Estate) Mass Valuation Systems for Taxation Purposes in Europe (FLCSR, 2001)* was sponsored, prepared and published by the Federal Land Cadastre Service of Russia and it analyzed replies submitted by 29 countries of the UN ECE Region. The countries included were the following: Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Cyprus, Denmark Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Romania, Russian Federation, Slovenia, Slovak Republic, Spain, Sweden, Switzerland and the United Kingdom.

valued at the same time, while maintaining low costs of implementation, mass valuation is often adopted. Mass valuation of real estate is defined as a systematic valuation of groups of real estate units performed on a certain date, which is carried out through standardised procedures of statistical analysis. In contrast, individual valuation is focused on determining the value of individual property units.

Because of its close link to the fiscal necessities of states, mass valuation is performed to serve the public interest. According to the responses to the questionnaire, the following trends were revealed:

- The majority of responding countries (72 per cent) reported to have adopted systems of mass valuation of land for taxation purposes.
- Fourteen per cent of countries reported to be in the process of developing systems of mass valuation for taxation purposes at the time the study was conducted (all these countries were characterised by having transitional economies).
- Fourteen per cent of countries did not have systems of mass valuation of land for taxation purposes. These countries, however, did count with a net-wealth tax based on the value of assets. They also counted with other types of taxes that are levied on real estate (e.g. Bosnia-Herzegovina, Hungary, Malta and Norway).

Usually, land administration authorities in the ECE region are responsible for mass valuation of land or real estate and the maintenance of related databases. In many countries that responsibility is also delegated to taxation or finance authorities. Also, in some countries local authorities play the leading role in valuation of real estate. Most responses also show land administration

authorities contribute to the development and implementation of mass valuation techniques (although the undertaking of valuation procedures can be performed by the public as well as by the private sector).

In historical perspective, mass valuation of land for taxation purposes is a relatively new phenomenon. In the UNECE region, mass valuation developed in the early twentieth century, when governments were in need of relatively economic ways to obtain precise general approaches to assess all property units for improved taxation. Since then, mass valuation was also influenced by rapid development of statistical models and computer technologies.

In the UNECE study, a significant amount of responding countries indicated that systems of mass valuation for taxation started to develop only after 1990 (45 per cent of respondents). Most of them can be characterised as economies in transition, where real property valuation has become an urgent issue after the processes of restoration of property rights to land.

A major issue of divergence among national experiences has to do with the identification of objects of taxation, which is critical to the workings of mass valuation systems. Respondents have indicated different visions of what is regarded in their countries as objects of mass valuation for taxation purposes. These views are closely related to the land administration systems that exist in different nations. While in some countries land is only understood as the surface of earth, in others the term land also includes improvements attached to it. The majority of respondents have indicated that according to their domestic legislation, objects of mass valuation include both land and improvements. However, some respondents maintained that unimproved land was the sole object of mass valuation while improvements are evaluated separately.

The study has also revealed different approaches to identifying objects of mass valuation in urban and rural areas.

On what concerns the competency of authorities, the study showed that the majority of countries regulates mass valuation through national legislation. For countries in transition, the introduction of mass valuation systems for taxation purposes may take years of preparatory work before the system becomes operational. That is why in some countries where land valuation is in the development stage, the valuation activities are performed on the basis of resolutions by the government or are based on a specific methodology developed within certain public agencies. This situation particularly concerns countries that are shifting from normative land valuation to value indicators based on market principles.

Also, the study found that financing of mass valuation activities is mostly performed by central governments (55 per cent responded that the central government budget was the main source of funding for mass valuation). In some countries, financing was a result of joint efforts of central, regional and local authorities (i.e. 17 per cent show that this activity is jointly financed through central and local budgets). A few respondents mentioned that mass valuation is financed by fees or that it is undertaken on a commercial basis (7 per cent report to have fees as a financing source). Responses reflected that local authorities might act as users of cadastral data needed in order to create lists of taxpayers. In such cases, the local authorities pay fees to holders of information for the use of data.

Another finding of the report was that the regular revaluation cycle of land or real estate is an important element of mass valuation systems. Revaluations are necessary to maintain the level of revenue provided by land or real property taxes that would otherwise be affected by inflation.

Other reasons for revaluations are changing market values of real properties and the need to promote fairness in revenue collection. The frequency of revaluation is usually specified in national legislations. In most countries, revaluations are performed every four or five years. Recently, due to the development of information technologies, revaluations are easier to perform and may be undertaken more often. On the other hand, there are a number of countries where revaluations have not taken place for many years.

Indexation within regular revaluation cycles is another way to adjust taxable property values. The level of indexation should be relative to the development of real estate markets and inflation rates in a given country. Responses indicate that the number of countries that use indexation is slightly greater than the number of countries that do not do it. Countries with annual revaluation cycles often do not have indexation practices. In the majority of cases, when changes affecting property values are significant, the data from individual valuations is used to improve the accuracy of mass valuation. The data obtained from real market transactions or through individual valuations of property is entered into general valuation models that yield the new assessed land or real property values.

The study showed that in the majority of countries, the valuation data is open to the public (41 per cent of responses). A considerable number of responses also indicated that only persons with recognised interests in the topic should be allowed access to valuation data basis (27 per cent show valuation data to be partly open). Some countries also mentioned that their governments maintain data bases on valuation that are closed to the public (14 per cent of the cases).

Because mass valuation for taxation purposes is a less costly exercise than valuation of individual real property units, some governments seek ways to use information obtained through mass valuation for purposes other than taxation of property.

Among respondents, 34 per cent use mass valuation data for purposes other than taxation, whereas 48% show that mass valuation is exclusively performed for taxation purposes. Among examples of the former are calculation of transfer taxes and stamp duties. In some countries, this information is used, for instance, to calculate compensation payouts in land reform and land consolidation procedures, or for the establishment of a starting price for land privatization.² Mass valuation data may also serve as an informal indicator of land market value for mortgaging procedures.

Across the region, mass valuation of land (real estate) is based on three traditional approaches:

1. Market value comparison: the market value is the estimated amount for which an asset should be exchanged on the date of valuation between a willing buyer and a willing seller in open market transactions wherein the parties had acted knowledgeably, prudently and without compulsion. The market value comparison approach includes analysis of data from sales of similar land or real estate units and the related adjustment of data needed to provide estimates of value for groups of units that are being appraised.
2. Replacement cost: is based on estimation of replacement costs of a real property unit with subtraction of depreciation sustained by improvements. A market value of land as if vacant is added to the amount of improvements value resulting in the amount of a total assessed market value.
3. Capitalization of income: measures the present value of the future benefits of land (or real estate) ownership. Most commonly the value is assessed using actual or estimated income derived from a property with application of capitalization factor.

In the mass valuation process, a combination of all three approaches is commonly used to determine taxable values. Different types of land or real estate might be subject to different valuation approaches depending on their characteristics, legal background of the country and availability of trusted market data. The majority of respondents have indicated using a combination of various approaches that may be applied to different types of real estate.

The market value comparison approach yields best results in the housing sector. But although this is the most common and preferred approach, results provided by mass valuation models depend on the number of market transactions that can be used during the analysis and the accuracy of source data (sale prices). These obstacles seriously limit the potential to use the market value comparison approach in economies where markets do not provide sufficient market data or transacting parties are interested in hiding true sales prices.

The income capitalization approach is helpful when there is no or little comparable data available to perform mass valuation. It is often used for valuation of rental properties like apartment blocks, stores and offices. In some

² Complications linked to the implementation of land reform and land consolidation exercises have been a central issue in the agenda of land administration authorities in some countries in transition (see for instance, the Land Administration Review of Bulgaria (ECE/HBP/WP.7/2009/5) and the Country Profile on the Housing Sector of Azerbaijan (forthcoming).

economies the income approach is also used in such market sectors as farmland or forestland. In such cases, soil quality factors and crop statistics play an important role in valuation. Finally, the success of the replacement cost approach is subject to the availability of information on construction costs and depreciation rates. In transitional economies this approach is often used to establish the value of industrial businesses, especially at the time of their privatization.

The majority of respondents have reported that encumbrances of rights are not taken into account in mass valuation. In countries where they are taken into account, they are commonly limited to formally registered encumbrances and do not include private obligations.

Commonly, the same authorised techniques of land or real estate valuation are applied to all property units with no possibility to retreat from established rules. Indications were given that in some cases there might exist an opportunity for such retreat if there are special conditions that are not reflected in the mass valuation models. In those cases, an approach closer to a true market value is preferred. The report showed that 45 per cent of countries surveyed show no opportunity to retreat from authorised mass valuation techniques. It also suggests that fairness in taxation of land or real estate is subject to official statistics being responsive to actual market prices. Because the equivalence between the two usually only exists at the time of sale, mass valuation models may only provide estimates of market values. Among surveyed countries, 45 per cent claim to have conformity between official statistics data and actual market values or assessed market values, whereas 17 per cent show that official statistics only partly correspond to actual market data. Inability to reflect true market value in official statistics is explained by the lack of market transactions data and high costs of individual valuations relative to

mass valuation. Best practice examples show that conformity between official records and actual market values is achieved when low transfer taxes are established and taxpayers are not inclined to hide true sales prices, while the declared prices are later used by financial institutions for references in mortgage transactions. Maintenance of market price registers, systematic market studies and compulsory income declaration by taxpayers also facilitates the process.

The information that is used in mass valuation depends on the type of valuation approach and mostly refers to property descriptions rather than property owners. Property description often includes, but it is not limited to, such factors as location, land area, size of building, construction materials, rent, soil productivity, economic development indicators, etc. Absence of a need to have information on property owners avoids abuses that can occur during individual valuation. It is more common that taxpayers can appeal against values established through mass valuation. The usual practice is for the owner of land (real estate) first to appeal to an executive authority that did the valuation and then to the relevant court. Sometimes the period of appeal is limited to a certain time following which the values cannot be changed. Among surveyed authorities, 72 per cent of responding countries acknowledged to have a system of appeals in place.

In what concerns the taxing systems, for different countries the collection of revenues are characterised by a variety of taxes levied on land and real property. In general, some countries have established direct land or real property taxes whereas other countries levy taxes on wealth rather than on land and improvements on it. Mass valuation tools for taxation purposes are more relevant in the case of a direct tax.

Transfer taxes are another important group of taxes that are applicable in a majority of countries. They are only collected when changes of property owners occur and individual valuations are commonly used to establish taxable values. Some respondents have indicated that mass valuation results can also be used to establish amounts due for collection as transfer taxes. Most countries in the UNECE region also charge capital gains tax.

There are also examples of taxes being levied on abandoned or neglected houses and building or underdeveloped sites. Most responses indicate that land and other real estate taxes are collected through a single common tax. In these cases, values of land and improvements are often calculated separately with both assessments made at the same time. A proportion of the total tax that is related to land depends on the market values in the geographic area where the property is located. It is common that all types of properties are subject to taxation. In most countries non-profit facilities, public infrastructure facilities, public real estate, forest and farmland, non-productive land and real estate located in special economic zones can be subject to tax exemptions. A small number of countries reported no tax exemptions (tax exemptions may also be applied to different groups of the population).

Finally, the report also found that local authorities are responsible for the establishment of land and real estate tax rates. Tax rates are commonly established according to national legislations and regulations. In a significant number of countries, national authorities set the tax rates. In many countries local authorities also have rights to set land and real estate tax rates. In nearly all such cases, the tax rate ranges within certain intervals that are typically set by national legislation. Most responses indicate that taxpayers have the right to appeal against assessed tax values of land

or real estate. Commonly the appeal is first directed to the assessing agency and if it is not satisfied the appealing party might go to court. Sometimes the time to make an appeal after the taxable value is established is limited. And some countries do not have appeal procedures in place. Although the replies indicated that mass valuation activities are mostly financed by national authorities, land and real estate taxes collected usually constitute the revenue of local authorities. It is also common that this revenue is divided in proportions between different levels of governments. Replies also indicate that different types of taxes levied on land and real estate may contribute to the revenue of different levels of government.

6.3 TAXATION AS AN INSTRUMENT TO IMPROVE EQUITY: THE ROLE OF HOUSING FINANCE SYSTEMS

After the publication of the study on mass valuation, the WPLA continued to promote cooperation on topics related to taxation. Taxation issues were addressed in such publications as the guidelines on housing finance, which has contemplated the incorporation in land administration systems of certain provisions to guarantee fairness in the distribution of wealth through taxation on land and real estate, or the creation of subsidies to promote affordable housing for all sectors of the population.

The UNECE Committee on Housing and Land Management, of which the Working Party is a subsidiary body, works also on issues pertaining to land management and has recently published a series of guidelines on housing finance, which were prepared to assist countries in transition to create a market for mortgages in the housing sector. The publication also addressed the need of government intervention to guarantee affordable housing for all: “after the first steps in the transition process have been accomplished, the question of how to increase affordability of housing gains is of

importance for policy makers and it is the task of Governments to decide whether and to what degree different housing finance instruments should enjoy State support. Often governments apply a mix of different forms of support: a bonus to promote savings activities, debt interest reductions in the tax declaration to lower the interest burden or implicit or explicit government guarantees to stabilise secondary markets.” (UNECE, 2005a, 63)

The guidelines also argued that each individual finance technique should work only as a tool to achieve the goal of mobilizing funds for housing construction. Therefore, a variety of systems and instruments are desirable, which should result in healthy competition among lenders to the benefit of the borrower and the economy.

6.4 FUTURE CHALLENGES: TOWARDS SELF-FINANCED LAND ADMINISTRATION SYSTEMS

During its last meeting at the sixth session (Geneva, 18 and 19 June 2009), the Working Party has further addressed policy challenges related to taxation with the release of a document on guidance for the application of fees and charges for real property cadastre and registration services as well as the launching of a study on principles for sound real estate markets by the UNECE Real Estate Market Advisory Group.

The objective of the document on fees and charges was to provide guidance and promote good practice in the administration of information on land and real estate among UNECE member states. The work elaborates on a questionnaire’s findings on existing knowledge and country experiences by identifying existing trends and principles in financing real property cadastres and registers in the ECE region as well as the factors that influence the setting of fees and charges. The document argued that fees and charges

are inextricably linked to the principles of cost management and recovery. Cost management and cost recovery are essential to the sustainability of land administration services. Fees and charges constitute important means by which the operating costs of land administration can be recovered and are also a tool to promote and develop land markets. However, the study also acknowledged that subsidies are reasonable when the society at large can be reimbursed through the benefits resulting from the improved registration and cadastral systems, which holds true in particular in countries with low income levels. Usually, government intervention is considered necessary at the time of creation of the cadastre and registration national databases. In what concerns taxation, the report argues that attention should be paid to the design of fiscal cadastres, where very high precision can be mandated for tax purposes. In this case, the taxation authority should be made aware of the consequences of high technical specifications and the real costs that this precision will require (UNECE, 2009a, para. 45).

Concerning the creation of transparent rules for land and real estate markets, the Working Party, in cooperation with the recently created Real Estate Market Advisory Group is currently preparing a series of guidelines for the promotion of sound practices for government authorities, which seek to consolidate international standards for real estate valuation in the UNECE region. According to one of the principles proposed by the group of experts, which was endorsed by the Working Party, the promotion of property appraisal criteria based on commonly shared valuation standards should be applied, as reliable real estate appraisal is essential to market transactions, the access to mortgage loans and the definition of equitable tax policies. The rationale behind this principle is that, in order to contribute to the creation of more efficient and developed land and real estate markets, it is necessary,

on the one hand to improve the reliability of valuation processes for transaction purposes as well as for landed-property financing (based on prudential loan-to-value ratios for land or buildings). The urgency of legislation on these matters became evident in the context of the current global economic crisis, which originated in the real estate sector. On the other hand, it is considered that developing and fostering the introduction of reliable real estate rating systems may reduce sector investment risk and increase the availability of lower-interest-rate loans. In addition, the coordination of modern mass-appraisal systems could contribute to tax equalization avoiding situations where very different tax rates are applied to assets having similar economic and technical characteristics.

Based on this rationale, the following guidelines were proposed by the Real Estate Market Advisory Group:

1. Property valuation for taxation purposes should be based on transparent asset appraisal criteria according to international standards that are implemented at local and national level.
2. Property valuation for mortgage or loan-granting purposes should be based on transparent criteria, according to international valuation standards that are comprehensible and reproducible also by third-party valuers working for rating agencies for securitization purposes.
3. There should be sufficient transparency in data recording for information regarding comparable sales transactions to be readily available to all valuers.
4. The number and amount of taxes on land and/or transactions in land should not be disproportionate with respect to the value of and/or transactions in land which trigger the tax charge.
5. All market operators should have easy access to all the relevant information required to engage in a transaction.
6. All laws and procedures affecting property rights and transactions should be well documented, indexed and widely and openly available to the public at a reasonable price.

6.5 CONCLUSIONS

According to its terms of reference, the Working Party encourages partnership among the public and private sectors and their involvement in managing land resources and capacity-building for sustainable development. The Working Party encourages cooperation with educational institutions for enhancing capacity-building activities and it also coordinates events with other international organizations, groups of experts, and non-governmental organizations. Over the last ten years, questions related to the taxation of land and real estate have been the subject of many initiatives (some of them referred to in detail above) by the Working Party, and it continues to be at the core of its programme of work as it relates to such issues as the transparency of real estate markets, land reforms in economies in transition and urban planning.

In the context of the present global economic crisis, the relevance of directives for a more stable economic environment in the UNECE region is likely to continue to be a priority for land administration authorities. The Programme will continue to focus the attention on the regulatory role that state authorities in the region need to carry on to guarantee that the social and economic benefits of sound land administration are spread to all stakeholders, especially the most vulnerable groups.

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07 LAND AND PROPERTY TAXATION IN MONTENEGRO

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Abstract

Local governments' fiscal autonomy is very much defined by the scope of their own source revenues. Own revenues limit the dependence of municipalities on the intergovernmental transfers and shared revenues received from the national budget. In countries of former Yugoslavia, the various taxes and fees on real estate are a significant revenue source of the local governments. Section 7.1 gives an overview on the characteristics and role of real estate tax in these countries. Particular problems occur due to the ongoing process of transition from the former socialist system and limit the containing impact of real estate tax on speculation in land and housing markets. Also, in transition countries local governments often are reluctant to levy property tax. Another important aspect is the numerous informal settlements and illegal construction in the post-socialist countries of the former Yugoslavia which are usually not subject to taxes and fees. Thus, local governments in particular are deprived of substantial revenues. Quick privatization of former state owned housing stock to tenants resulted in the fact that low-income owners with high-value real estate. This is a main obstacle against wider use of property tax in some countries. Thus, land policies and land management are essential preconditions for solving the housing problem and ensuring a stable land and housing market which enables affordability for the low income earners too. Only in combination with well coordinated land administration and planning, can real estate tax have influence on speculation in land and housing market. This thesis is elaborated in more detail on the example of Montenegro in section 7.2. Key problems and challenges for further improvement of taxation system and development of land market and urban development in Montenegro are pointed out which limit the containing impact of real estate tax on vast speculations in land and housing market. The last section presents basic information on a software tool for real estate taxation developed and implemented in Montenegro in the scope of a project of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

Key words: Property taxation, former Yugoslavia, Montenegro, ETerraPN

7.1 PROPERTY TAX IN COUNTRIES OF FORMER YUGOSLAVIA

The significance of local revenues for local governments is well accepted. Local governments' fiscal autonomy is very much defined by the scope of their own source revenues. Own revenues limit the dependence of municipalities on intergovernmental transfers and shared revenues received from the national budget. Local tax autonomy makes collection more effective and authorises municipalities to introduce their own social policy measures. These sources of revenue also increase the local governments' accountability: taxpayers usually control municipal spending decisions more carefully when expenditures are financed through local taxes.

Among the various fees, charges and tax revenues, property related taxes and fees are significant revenue sources for local governments due to several reasons. Primarily, the tax base is visible to everyone and it is hard to evade the tax levied on real estate. The enforcement is easier, because a lien can be attached to the property. For the local government it is a stable source of revenue and in the long run it follows the changes in local economic development (NALAS, 2009).

Countries in south-east Europe gradually developed their own sources of revenue for fiscal decentralization. In countries of former Yugoslavia, the various taxes on real estate have been established within the new fiscal framework of modern local governments. The basic laws on local property taxes were formulated during the past decade, after restoration of private property rights in land. Today, the main task is to increase local property tax revenue through more efficient tax administration and to deal with the social consequences of a higher local tax burden (NALAS, 2009).

Except Croatia where there are currently no recurrent taxes on immovable property (GTZ, 2007b), all countries of former Yugoslavia levy real estate tax. The legal basis of local property taxation is usually set by three types of laws. The law on local government finances often specifies the main local independent source revenues, including local taxes. The detailed regulations on local property taxes are set by specific tax laws. The general rules of tax administration are usually set by the regulations on tax procedures.

In transition countries local governments often are reluctant to levy local property tax. Low-income owners might have high-value real estate and taxing them would cause social problems. Especially in those countries where social housing stock was returned to tenants and where property value is increasing rapidly, this is a main obstacle against wider use of property tax. However, the legal regulations usually provide several methods for dealing with this problem of affordability: providing exemptions to certain homeowners, limiting the tax burden as a percentage of household income, freezing tax rates or delayed payments.

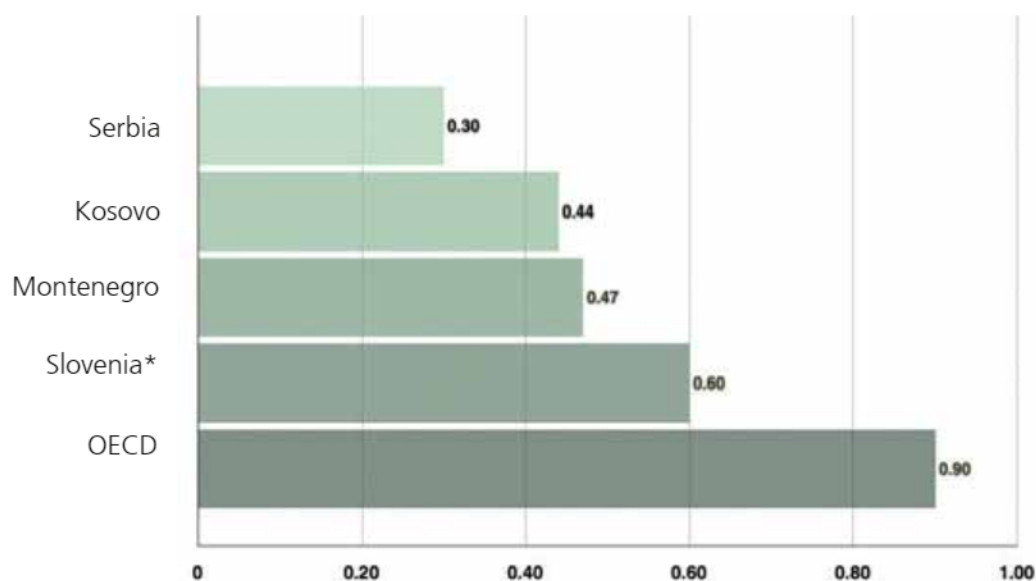
The tax rate can be defined in percentage of the property value of the area of the property. With the exception of Bosnia and Herzegovina, the value based local property taxes are introduced in former Yugoslavia (see Table 7.1). The value based property tax is regarded as a more efficient one, because it better reflects the relationship between the use of locally provided services and the price paid for them through local property taxes. The value based property tax also better shows the affordability of the property tax since a homeowner's income is usually in correlation with its value.

TABLE 7.1 VALUATION METHOD AND TAX RANGES FOR PROPERTY TAX

	TAXATION METHOD		TAX RATE RANGE	
	Value based property tax	Area based property tax	Minimum	Maximum
Bosnia and Herzegovina		X	FBiH, RS: set by the Cantons; Brcko district: 0.05%	Brcko District: 1%
Montenegro	X		0.08%	0.80%
Macedonia	X		0.10%	0.20%
Serbia	X		0.40%	3.00%
Slovenia	X (mass evaluation)		Dwellings: 0.10% Premises for rest and recreation: 0.20% Business premises: 0.15%	Dwellings: 1.00% Premises for rest and recreation: 1.50% Business premises: 1.25%
Kosovo	X		0.05%	1.00%

Sources: (NALAS, 2009), (SVLR, 2009)

FIGURE 7.1 LOCAL PROPERTY TAX OF SELECTED COUNTRIES IN % OF GDP COMPARED WITH OECD AVERAGE



Sources: (NALAS, 2009), (SVLR, 2009), (MoF, 2009b)

* The figure for Slovenia includes revenues by real estate tax as well as other property related taxes

Often, the value based local property taxes are regulated through a nationally set property value. Slovenia is the only country in the region which introduced a mass evaluation system for taxation of real estate. However, area based property taxation might work better in countries with underdeveloped property markets and when property prices change quickly, as the area based taxes are less volatile.

In all countries of former Yugoslavia local governments have discretion in levying local property taxes within ranges set by law. The minimum level of property taxes obliges the local governments to use the tax instrument. The maximum rate limits their autonomy and keeps the total tax burden under control and balances the national and local budget taxing powers.

In countries with a long tradition of using real estate taxes, the overall property tax revenue is around 2-3 per cent of GDP, but the average of OECD countries is 0.9 per cent (NALAS, 2009). The average share of local property tax in GDP of the countries in former Yugoslavia is even significantly below the OECD average (NALAS, 2009). In Montenegro, Serbia and Kosovo, the revenue by real estate tax varies between 0.3 and 0.47 per cent of GDP (NALAS, 2009). In Slovenia the revenue by taxes on property (real estate tax as well as other property related taxes) amounts constantly to 0.6 per cent of GDP since 2003 (SVLR, 2009).

With exception of Slovenia, the countries in former Yugoslavia are still in the process of transition. The share of local property tax in the total local revenues varies significantly between the countries of the region. For 2008, percentage ranged between 9.1 per cent (Montenegro) and 15.7 per cent (Macedonia) of local total revenues.

It seems, while the importance of local real estate tax in Slovenia - as the most advanced country in terms of economic transition - is increasing, the share of revenues realised through real estate tax in total revenues of the local governments in countries which are still in the transition process such as Serbia and Montenegro is even decreasing (see tables 7.2 and 7.3). This limited role of property taxes in local budgets is in line with the relatively low scale of services provided by local governments. Local budgets are usually in the range of 3 to 7 per cent of GDP in these countries.

Several factors inherited from the socialist period limit the containing impact of real estate tax on speculation in the land and housing market in the countries of former Yugoslavia. With exception of Slovenia, the status of public property in the countries in former Yugoslavia is not yet completely solved whereas the border line between real estate and personal property is rather thin and often uncertain. Property is usually categorised as real estate or personal property. Usually, local governments in countries in former Yugoslavia have the right to levy charges on the use of public property even when they are not the owners of the public or social assets. The various property-related fees and charges shall reflect the "rent" paid by the private entities for using public assets (e.g. fees on using urban construction land, fees for urban zoning etc.). Charges on the usage of public and social property were always an important revenue source for local governments. In 2009, Montenegro abolished the fee for using urban construction land which amounted to 69 per cent% of local fiscal revenues in 2008 (MoF, 2009a). In Slovenia, the compensation for the use of building land amounts to 56 per cent of the total assigned revenues of local self-governments (including real estate tax) (SVLR, 2009).

TABLE 7.2 LOCAL FISCAL REVENUES AND REVENUES BY REAL ESTATE TAX OF MUNICIPALITIES IN MONTENEGRO AND OF IN SERBIA IN THE PERIOD 2006-2008

	MONTENEGRO			SERBIA		
	2006	2007	2008	2006	2007	2008
Local fiscal revenues (% of total local revenues)	58.5	55.4	83.2	54.6	47.0	45.4
Real estate tax revenues (% of total local revenues)	12.9	9.9	9.1	13.0	11.5	10.1

Sources: (HOT, 2008), (MoF, 2009b), (MoF, 2008), (MoF, 2007)

TABLE 7.3 LOCAL TAX REVENUES AND REVENUES BY PROPERTY TAXES* OF SELF-GOVERNMENT UNITS IN SLOVENIA IN THE PERIOD 2004-2006

	2004	2005	2006
Local fiscal revenues (% of total local revenues)	48.0	45.6	44.3
Local revenues by property taxes (% of total local revenues)	14.4	15.8	16.2

*Beside real estate tax also other taxes, which belong to a municipality, such as taxes on movable property, inheritance and gifts, and taxes on real estate transactions and on financial assets)

Source: (SVLR, 2009)

Another important aspect are the numerous informal settlements in the post-socialist countries of the former Yugoslavia. These were established in the 1970s and 1980s, and their number further increased as a consequence of the ethnic conflict of the 1990s. Kaluderica settlement, one of the fastest growing settlements in Serbia and arguably the largest in the Balkans, accommodates an estimated 50,000 people, among them refugees from Bosnia and Herzegovina and Croatia. Prishtina is another particular example, where the number of citizens doubled within the period 1980 to 2006 and where illegal construction activities restructured 75 per cent of the town area (Vöckler, 2008). In the Former Yugoslav Republic of Macedonia, informal settlements are home to 11 per cent

of the population in the 14 largest cities (UN ECE, 2009). In Serbia and Montenegro, due to the weak and out-dated planning system, widespread illegal construction has taken place since the 1990s. Usually, illegal and informal constructions are not subject to taxes and fees, depriving local governments of substantial revenues.

Thus, land policies and land management are essential preconditions for solving the housing problem and ensuring a stable land and housing market which enables affordability for the low income earners too. Only when it is combined with well coordinated land administration and planning, can real estate tax have influence on speculation in land and housing market. The example of Montenegro shall be discussed in more detail in the following section.

7.2 LAND MARKET AND REAL ESTATE TAX IN MONTENEGRO

Montenegro is the youngest nation in the community of European peoples and one of Europe's smallest states with a population of 620,000 living within an area of around 14,000 square kilometers. Approximately 51 per cent of the population live on 22 per cent of the total territory: the coastal region and the economic centers of the capital city Podgorica and Nikšić. Montenegro consists of 21 municipalities. Foreign direct investments in land and real estate increased tenfold since 2004.

In 2001 Montenegro launched reforms of the tax system and overall financial system. Amongst others, the main objectives of the tax reform were focused on harmonization of the tax system with the EU Directives and international standards; making the tax system simpler, more efficient and easier to implement; and generating income required for budget needs. In the scope of the tax reform, some competences related to collection of local revenues have accordingly been delegated to the local government (GoM, 2003). By the Law on Real Estate Tax, entered into force in January 2003, the competency for levying, collecting and controlling tax on land, buildings, units of buildings, and other structures has been transferred to the local self-government units.

TABLE 7.4 LOCAL PROPERTY TAX IN MONTENEGRO IN PERCENTAGE OF GDP AND IN PERCENTAGE OF TOTAL LOCAL REVENUES

year	Total local revenues in % of GDP	Local property tax in % of total local revenues
2008	6.0	4.8% (0.9%-19.8%)
2007	9.0	4.9% (1.0%-14.6%)
2006	6.1	7.0% (1.5%-35.7%)

Source: GTZ project records based on statistics of the municipalities, (MoF, 2009b), (MoF, 2008), (MoF, 2007)



The tax rate ranges from 0.08 per cent to 0.80 per cent of the property market value, while its amount is determined by a municipality, according to its own specific characteristics (GoM, 2001).

The budget of local self-government units in Montenegro is in the range of 6 – 9 per cent of GDP. The share of local property tax in the total local revenues decreased during the past years to 4.2 per cent in 2008 (see Figure 7.2). When considering individual municipalities, the share ranges between 0.9 per cent and 19.8 per cent in 2008, showing a wide difference among them and also a general decreasing tendency (Table 7.4).

The coastal region, with its tourism development, is the motor of the Montenegrin economy. The biggest part of the foreign direct investments is in real estate and other tourism related facilities in the coastal region. This is also represented by the revenues of real estate tax which are significantly higher in the six coastal municipalities than in the rest of the country. The central region of Montenegro is the administrative centre of the country which results in a different, more diversified economic structure. Consequently, real estate tax is less important, as a local revenue source, compared to other sources of local revenue. Whereas in the economically underdeveloped northern municipalities the transfers to the local budget through the equalization fund are the major revenue source with increasing tendency (see Figure 7.3). The different economic strengths of the regions of Montenegro is also illustrated by the relation between the revenues by Real Estate Tax and the municipal revenues by the share in the Real Estate transfer tax (see Figure 7.5).

The equalization fund, established in 2004, is one of the main instruments for financial balancing of these less developed municipalities, amounting to more than 40% of the total budgetary revenues of a few northern municipalities.

Important sources of local revenues are the fee for using urban construction land as well as the fee on urban zoning. In 2009, Montenegro abolished the fee for using urban construction land which amounted to 69 per cent of local fiscal revenues in 2008. In combination with the global financial and economic crises, this will have tremendous implications on local budgets: in the first three months of 2009 the realised revenues of Montenegrin local governments dropped by 37 per cent (MoF, 2009a). This will lead to a significant increase of the importance of real estate tax. Consequently, the Montenegrin municipalities will have to dedicate more efforts toward increasing the collection rate of real estate tax which is currently at an unsatisfying level of 56 per cent in average.

FIGURE 7.2 LOCAL PROPERTY TAX IN MONTENEGRO IN PERCENTAGE OF TOTAL LOCAL REVENUES

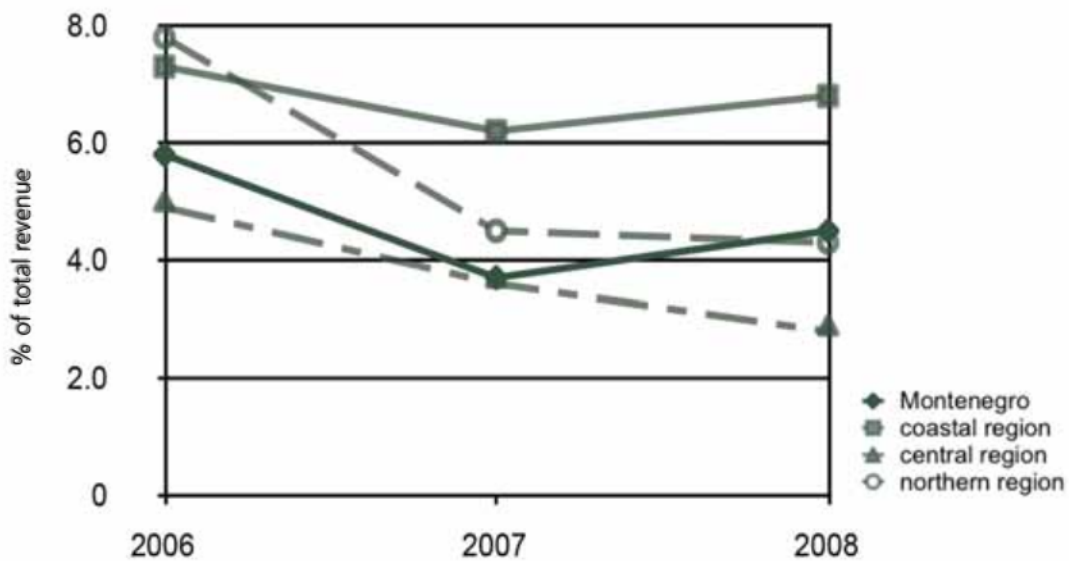
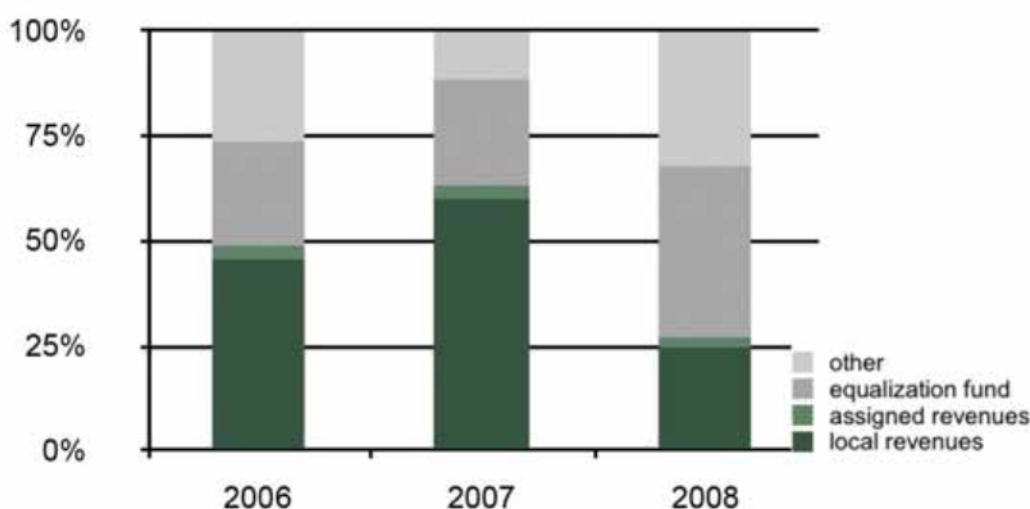
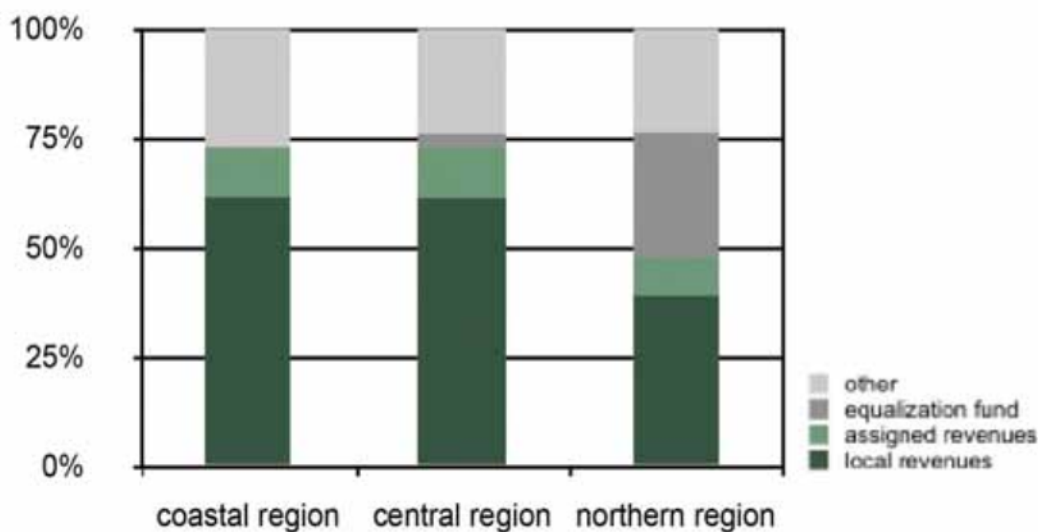


FIGURE 7.3 LOCAL BUDGET SOURCES IN MONTENEGRO



Sources: (MoF, 2009b), (MoF, 2008), (MoF, 2007)

FIGURE 7.4 LOCAL BUDGET SOURCES IN MONTENEGRO PER MONTENEGRIN REGION



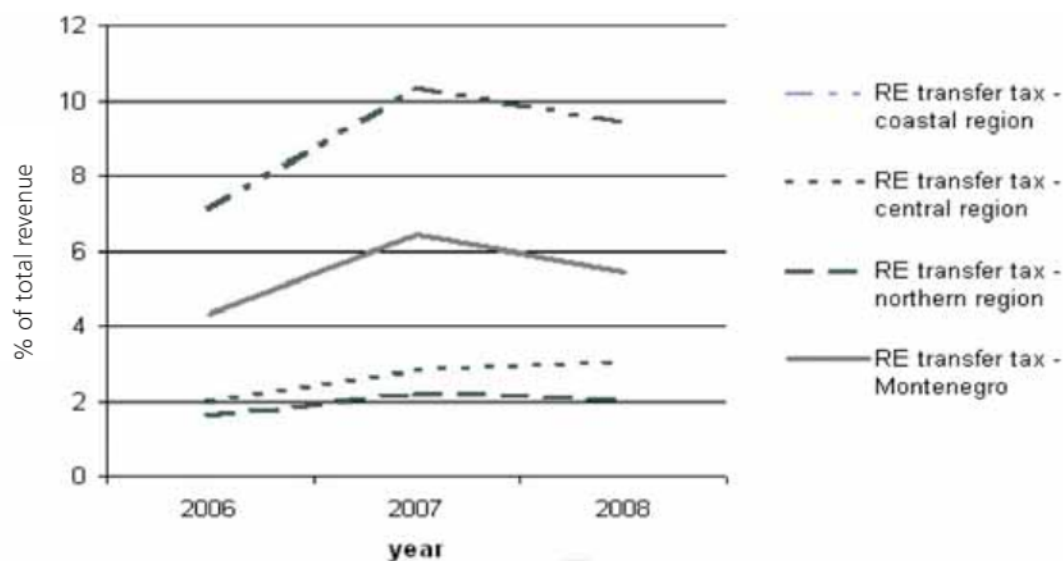
Sources: (MoF, 2009b), (MoF, 2008), (MoF, 2007)

Major reasons for this bad realization of debited real estate tax are:

- Insufficient quality of tax data base,
- Problems in delivery of tax bills, and
- Insufficient application of legal possibilities for tax enforcement

The compilation of an inventory on all the taxable property units and tax payers can be implemented only if the property registry, i.e. cadastre, with regularly updated information, is able to provide these data. As in most of the countries of the region, outdated registries on real estate and owners of real estate are a basic problem.

FIGURE 7.5 REAL ESTATE TRANSFER TAX IN MONTENEGRO



Sources: (MoF, 2009b), (MoF, 2008), (MoF, 2007)

In Montenegro, only approximately 51 per cent of the total territory is covered by the Real Estate Cadastre. Even in those areas, the data often do not represent the complete ownership situation in a sufficient manner. Since the mid-1990s, the Real Estate Administration invested a lot of effort for establishing the Real Estate Cadastre, but it will still take several years to finalise a country-wide evidence of real estate and to implement efficient procedures for its constant maintenance.

The upward trend of prices in the past years indicates that real estate tax does not have significant influence on stopping speculations in land and housing markets. On average, the market price for real estate increased by approximately 100 per cent in the coastal region, reaching 140 per cent for plots (CEED, 2007).

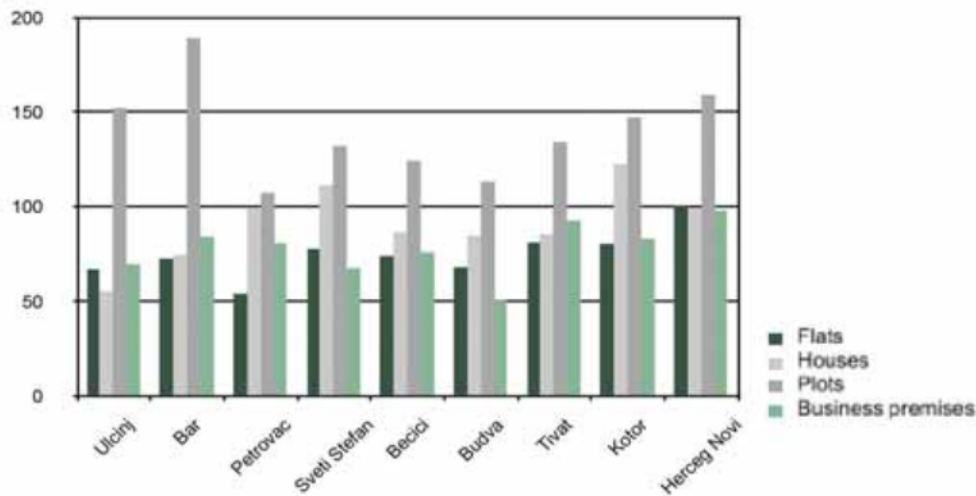
Typical rents in Podgorica are between EUR 100 and 300 (average EUR 150) for a small apartment, although the average monthly income is only EUR 200. The purchase of a housing unit would require the payment of the total purchase price – between EUR 50,000 and 150,000 – to the real estate developer upfront in the case of new construction (with

huge risk involved), or to the owner in the case of a real estate transaction in the secondary housing market (UNECE, 2006).

There is a high share of recreational properties and vacant apartments in particular in the coastal region of Montenegro. Typical sale prices for houses with adjacent land in Podgorica range between EUR 65,000 and 150,000 (UN ECE, 2006). Apartments appear to be priced in the same way, about EUR 1,500 per m²; prices for some first class locations at the coast reach EUR 5,000 per m². Given the lack of credit for the purchase of residential properties, and the official income data, prices in the housing market reflect the size of the gray economy and the lack of other opportunities for investment.

Podgorica and some of the other large cities, however, have attracted a great number of migrants and refugees. Over 6,000 households, many of them Roma, live in substandard dwellings. Vulnerable groups, represented by refugees and poor local households, occupy less than 14 m² per person, while the national average area is about 26 m² per person. (UN ECE, 2006).

FIGURE 7.6 MARKET PRICE INCREASE IN SELECTED COASTAL TOWNS OF MONTENEGRO IN THE PERIOD 2004-2007



Data Source: CEED, 2007

Illegal construction is widespread in Montenegro. The situation is aggravated in expanding cities like Podgorica, where illegal construction creates planning, legal, financial and physical constraints for adequate network connections. According to the records of the Real Estate Administration there are about 40,000 illegally built structures within the territory of Montenegro, around 41 per cent of which are in the capital Podgorica (MoSP, 2009). However, even the responsible Ministry for Spatial Planning and Environment states that the real number of illegal structures is significantly higher. It is estimated that about 80 per cent of all construction in the coastal town of Budva is fully or partly illegal.

Though significant progress has been achieved in the previous few years, the reasons for today's situation remain:

- Out-dated planning documentation
- Inadequate spatial data, in particular incomplete and out-of-date data of the Real Estate Cadastre
- Long administrative procedures for building permits
- General lack of institutional capacities on national and local level, in particular in the field of building inspection

Montenegro has already taken important steps to improve the situation regarding illegal construction and informal settlements by signing the Vienna Declaration on Informal Settlements in South Eastern Europe in 2004. This was followed by a Housing Policy Action Plan in 2005 that started the reform of the legal framework in the planning sector. Implementation still needs additional effort in order to achieve a significant improvement.

Although in the previous years there has been a constant increase of local revenues through real estate tax, due to big problems in the planning and construction sectors, the role of real estate tax in financing affordable housing and infrastructure in Montenegro is currently limited. In order to realise the existing potential for a further increase of local revenues, two priority tasks are (GTZ, 2007a):

- To improve enforcement of tax collection, which requires both improved administrative procedures and improved legal regulations,
- To improve tax data base which requires improving the quantity and quality of the data of the Real Estate Cadastre

7.3 ETerraPN – A SOFTWARE TOOL FOR REAL ESTATE TAX IN MONTENEGRO

As responsibility for real estate taxation has been transferred to the Montenegrin local self-governments in 2003, the national tax database has not been completely transferred to the local level. The compilation of an inventory on all the taxable property units and tax payers can be implemented only if the property registry, that includes regularly updated information, is able to provide these data. In this regard, the development and implementation of a software tool for real estate tax in Montenegro by the GIZ-supported Municipal Land Management Project had as a major objective to improve the tax payers' data base by enabling access and use of the data of the Real Estate Cadastre on ownership and real estate. The Real Estate Cadastre is the official registry of ownership and other rights on real estate kept and maintained by the national Real Estate Agency.¹ Additionally, more efficient and transparent administrative procedures for determining, calculating and collecting real estate tax have been supported by the software ETerraPN.

The property tax cycle consists of three phases: Identification and description of the property unit, property appraisal and valuation, and tax administration. The developed software tool ETerraPN supports the main steps within this cycle:

- Transfer of information from the property registry
- Characterization of the property (location, area, physical conditions, legal rights)
- Information on taxpayers
- Calculating the specific value for the property based on valuation model design, assessment and quantification of factors influencing property value.

¹ As in other countries of the region, not updated registries which do not represent the complete ownership situation are a problem. This issue is being tackled by the GIZ-project as well, but is not dealt with in this chapter.

- Billing the taxpayers
- Accounting for the property tax
- Reporting to the local assembly and national tax administration

The software ETerraPN is one application of a modular, extendable software system ETerraSOFT. ETerraSOFT is a tailor-made local software which has been initiated and further improved in close cooperation with the Real Estate Administration and the municipalities. The core of the software system is the data base management module enabling importing of the graphical and alpha-numerical records of the Real Estate Cadastre into the central municipal data base (see Figure 7.7). By that, the municipality has access to the official records on ownership rights of its territory and is in the position to utilise it. The provision of data by the Real Estate Administration is free of charge.

Currently, the digital data transfer from the Real Estate Administration to the municipality is initiated manually, whenever necessary, by a municipal operator. The automatic transfer of data will be enabled once certain security aspects are resolved.

The operators of the local tax authorities do supplement the data of the cadastre registry with additional information on the property and/or taxpayer which are necessary for determining and collecting real estate tax on objects and land. Since the data of the Real Estate Cadastre often are not updated and complete enough, the operators might add and / or correct certain data taken over from the cadastre registry in the municipal tax data base (see Figure 7.8). Additionally, the application offers administrative functions as the generation of different reports, and for administering tax zones, tax rates etc.

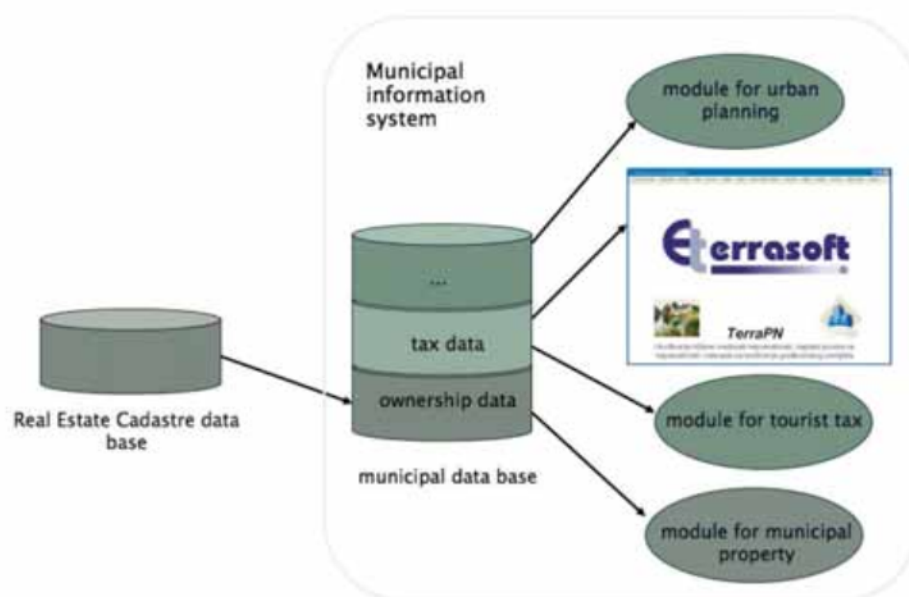
Implementation of the software started in 2006 in the coastal municipalities of Montenegro. With constant improvement of

the software, implementation continued in additional municipalities. Today, 10 out of the 21 Montenegrin municipalities use ETerraPN-software for the entire administrative process of levying real estate tax. One municipality uses the software for insight in the Real Estate Cadastre. Four additional municipalities will apply the software for issuing tax bills in 2010. As mentioned before, so far the Real Estate

Cadastre covers only approximately 51 per cent of the total territory of Montenegro. In particular, in the northern municipalities, the Real Estate Cadastre often covers only the central part of the main settlement. In order to increase the tax base for these municipalities, the possibility to import into the software and utilise the Census Cadastre has been implemented in 2009.

FIGURE 7.7 SCHEMA OF ETERRASOFT-SYSTEM

FIGURE 7.8 COMPARISON OF DATA ON TAX PAYERS OF THE MUNICIPAL TAX DATABASE AND THE REAL ESTATE CADASTRE IN THE SOFTWARE ETERRAPN



The Census Cadastre is the legal evidence of ownership rights in those areas not yet covered by the Real Estate Cadastre. These records do not contain a precise description of the property or its precise area, but nevertheless provide basic information on property owners and approximate area and type of land for a significant part of the municipal territory. Thus, the municipalities are entitled to use this data for levying property tax. This innovation provides for additional revenues, in particular for the economically underdeveloped northern municipalities for which tapping each potential for increase of revenues is of utmost importance.

Based on the experiences with ETerraPN in levying real estate tax, upon the initiative of some coastal municipalities, a similar software for the tourist tax (ETerraTT) was developed in 2008 and has been implemented in five out of six coastal municipalities today. Additionally, the project supported the development of a software module for urban planning (ETerraURB) and for administration of municipal property (ETerraMP) which is currently in the test phase.

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08 INNOVATIONS IN PROPERTY TAXATION SYSTEMS IN INDIA

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Abstract

Property tax is an important source of local revenue in many countries, but is often underutilised as a source for financing local expenditures, especially housing for the poor. In India, many local governments have initiated administrative and valuation reforms to improve collections from property taxes. However, reforms are aimed towards increasing collection efficiency of local governments. Therefore, it is difficult to establish any correlation between the revenue collected and that spent for housing the poor. In this chapter, we examine the reforms and their implications on the revenue base of the municipalities, taking case studies of two Indian cities: Bangalore and Ahmedabad. The chapter concludes that reform efforts which make assessment of the property tax base more realistic (market-based), bring positive impacts on revenue generation in per capita terms. Although the present reform measures are a good step towards improving the performance of the property tax, structural issues such as improved valuation, increasing buoyancy of the tax and tax payer's confidence, need to be addressed to make these reforms sustainable and replicable. The chapter strongly recommends a change in the assessment system of taxation with an inbuilt system of automatic revision. Such a system would be sustainable once it is linked with administrative reforms. Simultaneously, pro-poor budgeting with a focus on the low-income areas should be introduced in the country to ensure balanced urban development.

Keywords: *Property Tax, municipalities, pro-poor, 74th Constitutional Amendment Act, Annual Rental Value, Unit Area-based Method, Self-Assessment Scheme, rental value, rateable value, capital value*

8.1 INTRODUCTION

In India, property tax is one of the most important sources of revenue for municipalities.¹ Legal hurdles and poor administration have made property tax inelastic in most of the cities. Inability to de-link property tax from Rent Control Act had also played a crucial role in hampering this process. In the last decade, many cities across the country have introduced innovative practices in property tax assessment and administration. This has been reinforced by the launch of the Jawaharlal Nehru Urban Renewal Mission (JNNURM), a central reform that mandates reforms of the property tax system.

Property tax in India is applied to both land and buildings. Land and property are taxed under the same Acts and both are commonly referred to as property tax. Further, it is difficult to establish a one-to-one correspondence between the property tax collected and the expenditure incurred on financing housing and infrastructure for different sections of the population including the poor, which hampers their cross-correlation. Until recently, social housing was taken up by the state government through parastatal agencies like State Housing Boards or Development Authorities. The 74th Constitutional Amendment Act 1992 and JNNURM (2005) brought slum improvement/upgrading as one of the functions of Urban Local Bodies (ULBs).² Further, under JNNURM, 20-25 per cent of the serviced land needs to be earmarked for the urban poor.³ However, the modalities of such pro-poor measures are yet to be worked out.

¹ In India, urban local bodies of towns/cities below 300,000 inhabitants are commonly referred to as municipalities. Cities having more than 300,000 inhabitants are called municipal corporations.

² In India, the term urban local body includes all categories of towns/cities ranging from small towns to metropolitan cities.

³ The housing shortage in the country works out to be 24.7 million, the poor constituting 99 per cent of it.

In India, urban areas contribute more than 60 per cent of national income (Srivastava, 2005). Yet in terms of resources, ULBs raised only 0.63 per cent of national income (GDP) from their own resources for the year 2001-02 (NIPFP, 2004). It is clear that the resources of ULBs do not derive their basis from the buoyant urban economy. The revenue base of municipalities in Indian states has shown little sign of change, notwithstanding the 74th Constitutional Amendment Act (1992), wherein the ULBs became constitutional units of local self-governance.

Most of the cities in the country are unable to meet the increasing demand for infrastructure due to their slow growth in municipal revenues. Municipal corporations by virtue of their status, derive their fiscal powers from the state governments. The revenue powers also vary across states and cities e.g. octroi levying (municipal corporations' entire focus is on octroi collections rather than implementation of property tax reforms). In view of the poor financial condition of the cities, it is being recognised that property tax must be made a revenue productive tax instrument through an appropriate reform strategy. The last decade, especially the post 74th Constitutional Amendment Act phase, has witnessed considerable interest in property tax reform both from the administrative and the taxpayer's perspectives. Ahmedabad, Bangalore, Delhi, Patna, Indore, Hyderabad, and Pune⁴ have all introduced innovative practices in various areas related to the tax administration, assessment and collection.⁵

In most states the deficiencies in the current system of property taxation does not allow for full exploitation of the revenue potential of this tax. The present deficiencies occur on account of the present assessment system and poor administrative and information system

⁴ These are cities of India with more than a million residents.

⁵ In fact, Patna Municipal Corporation is the first local body to adopt the PT area-based assessment system in 1993.

currently in place. The JNNURM guidelines emphasise a) proper mapping of properties using GIS (geographic information systems) so that the cities are able to have full record of properties and bring them under the tax net b) making the system capable of self-assessment c) rationalization of exemptions and d) improvement of collections to achieve at least 85 per cent of demand.

In view of the above, this chapter explores the property tax reform in the country. Following the introductory section, the second section is an overview the legal, administrative, policy and institutional issues. The third section analyses the property tax reforms in Bangalore and Ahmedabad. The final section summarises the conclusions and suggests the way forward to ensure an equitable and elastic tax administration in the country.

8.2 PROPERTY TAX STRUCTURE AND RELATED ISSUES IN INDIA

Two clear and distinct methods of assessment are currently in practice in the country, namely the traditional Annual Rental Value (ARV) system and the recently introduced Unit Area-based Method (UAM) System or Unit Value System, which links rental values to the locational, usage and structural qualities of the building.

The main issues to be addressed while considering property tax reform are three fold:

- a) Tax structure and related legal issues,
- b) Tax administration and
- c) Policy and institutional issues.

a) Tax structure and related legal issues

Traditionally most ULBs had adopted the rent-based ARV as the basis to determine the property tax base. ARV is defined as the rent actually received, or the gross annual rent a property may fetch at the time of assessment,

if let out. What actually constitutes the “rental value” or “rateable value” has been the subject of considerable debate, especially in the context of the Rent Control law. Until recently, the Rent Control Act became the source code for fixation of ARV and therefore completely downsized the scope of taxing property to their actual potential. The principle of valuation under ARV has also been questioned on grounds of fairness, equity and efficiency.

Some of the major problems with the ARV system are:

- Rent deeds often suppress actual rent paid.
- Difficulty in arriving at hypothetical “rent” in the case of self-occupied properties, which have never been rented out.
- In areas where fair rent is not determined under the Rent Control Act, the ARV has to be worked by artificial method of valuation on the basis of annual rent determined as per the provisions of the Rent Control Act.

Experiments to abolish rent control were undertaken by a few states, which changed the method of valuation of property from ARV to an area-based system. While ARV reflects the income from a property in its current use, capital value reflects the market’s assessment of the income to be derived from a property in future including income generated by more intensive use of the property.

The tax base comprises the assessed value of land and improvements i.e., the value at which a willing buyer and seller would agree in a free market. Capital value system is extremely elastic allowing property tax a base that will grow with the economy.

However, the system of assessment based on capital value has its own inherent problems as mentioned below:

- In the absence of a free open market in property transactions, the purchase value of the property, particularly in metropolitan cities, does not reflect the true “use” value of the property, but is more a speculative price. Hence there is a tendency to under report transaction prices, to escape stamp duty and registration fees.
- There is limited availability of a centralised and computerised database of property transactions against which an objective assessment can be made. Further, the assessing staff are not trained to make scientific assessments. In such cases, valuation is done by valuers.
- Since the capital value is determined with reference to the date of acquisition or construction, the tax base gets frozen, and there is no buoyancy in the tax. This leads to wide disparities in similarly placed properties assessed at different points of time.

In theory, property tax should be a buoyant source of own revenue as the value of properties rise over time. Improper administration, poor collection and legal bottlenecks have made property tax inelastic in most of the municipal corporations. Efforts to increase tax rates, tax base and shifting to the Unit Area-based Method (UAM) of assessment have lead to considerable improvement in the overall structure of own resources in many ULBs.

The UAM uses simple arithmetic to calculate property tax based on the covered area of the building and the unit area value or unit area tax for the category (of locality or amenity) in which the premises is located.. This makes it possible for any citizen to self-assess his

property tax and file his return form. This could also be applied to vacant land as well. The law in most of the ULBs provides for levy of tax on vacant plots on the basis of the current market value. This has, however, remained on paper. Very little revenue is derived from this source and there is uncertainty as to how to tax vacant plots. This issue deserves urgent attention as a large number of vacant plots are not contributing to the tax base.

Though current property tax laws have evolved gradually with amendments to suit the requirements of cities, it is important to recognise that many legal aspects are yet to be resolved. Nonetheless, the UAM has given some measure of relief to both the taxpayers and ULBs. The immediate success of the UAM is that it has increased the per capita revenue of cities. Most cities, which adopted this system, have introduced the self-reporting system, thus shifting the onus of reporting the assessable value of the property in terms of the parameters provided under the system and the tax payable thereon. Since the owners have to file the self-reporting forms within a specified time, the level of compliance increased and, in turn, the revenue. The self-reporting system did away with the municipal staff’s onerous task of preparing the property tax bills. Even collection of tax was made simpler by increasing the number of collection centres and also facilitating payments at commercial banks. A weakness of the self-reporting scheme is that it could result in wrong reporting and consequently result in lower taxes. However, strict enforcement is required to prevent such attempts. On the positive side, the citizens have found that the self-reporting scheme has invested faith in them and secondly, for the first time they were made aware how to compute the valuation of their property and that such valuation was no longer at the discretion of the revenue staff. For these reasons, the area-based system found immediate acceptance.

Another positive side to the UAM is that in the valuation process it has included both the locational factor and quality of building. While such reforms, introduced in some cities, have achieved initial success, introduction of the reforms need to be incremental.

The positive impact of these reforms are:

- They have been successful in the short run.
- Revenues have increased significantly.
- The problem of a badly outdated valuation roll has been addressed.
- The taxpayer's have accepted the reform measures.

Effective Tax Rate

The state governments legislate the minimum and maximum tax rates the ULBs can levy on properties, which varies across states and cities. Apart from property tax, ULBs also at times levy some other taxes and cesses as a percentage of the property tax. These additional levies may be for municipal services or they may be collected on behalf of the state government. In Bangalore, the Bruhat Bangalore Mahanagara Palike (BBMP) levies a certain percentage cess on property tax on behalf of the Government.⁶ It may be mentioned here that collecting taxes for earmarked civic services is not a bad policy. In fact, all public policy experts recommend it. But by linking it to property tax, the effective tax rate is pushed up, which may not be a sound tax policy. Such earmarked charges for services should be charged separately and not combined in the property tax bill.

Tax Base

The property tax base may be defined as the extent of coverage of the taxable property. If this base is fully captured it can contribute to buoyancy. On the other hand, loss of tax base can result in loss of revenue.

⁶ In India, there are three tiers of the government: the central, state and local. Property tax is collected by the third tier, or the local government.

This can be possible through the following ways:

Exemptions: The municipal laws provide exemption from payment of property tax to certain classes of properties such as lands and buildings used by religious and charitable institutions, educational institutions recognised by the Government and hospitals.⁷

Vacant land: The law in most of the municipalities provides for levy of tax on vacant plots on the basis of the current market value. Very little revenue is derived from this source and there is uncertainty as to how to tax vacant plots. The BBMP has formulated guidelines on the basis of zonal classification of the city, which is paying dividends.

Vacancy remission: Most ULBs have a provision for granting remission or refund of tax paid for the period the property was kept vacant (generally for 60 days or more). Though well intentioned, such a provision is capable of large-scale misuse. In large cities, a number of apartments are purchased for speculative or investment reasons and are kept vacant for years. Such vacant properties are not assessed, thereby depriving the legitimate revenue to the ULB.

Time lag between revisions: All municipal laws provide for revision of assessment once in 4 – 5 years. In practice, this takes place once in 20 – 30 years. Such long gaps between revisions result in considerable narrowing of the tax base.

Non-inclusion of new areas: Peripheral settlements in rapidly urbanizing large settlements fall outside the limits of the municipal corporation but enjoy access to the city's infrastructure. They usually come under the jurisdiction of smaller municipalities or

⁷ Ahmedabad City Corporation has made a progressive deviation by levying tax at the rate of one rupee per square foot for religious and charitable institutions. Such a practice is worth replication by other ULBs in the country.

Panchayats⁸ and either escape taxation or are taxed at a lower rate. Even in the case of new areas developed by the City Development Authority and transferred to the City Corporation, action is not taken to register the new properties for several years.

Unauthorised properties: Unauthorised construction, which is common in India, is not taxed on the ground that assessing such buildings would amount to regularizing them. In Bangalore and Delhi, unauthorised areas have been categorised in 5th or 6th zones (E or F) and are liable to pay property tax although at a lower rate⁹.

Leased municipal properties: A number of municipal properties leased to individuals or institutions are not subject to tax, as the municipality owns them. Many of them are used for commercial purposes and thus a good tax base is lost. The law should be amended to make provision for taxing the owner as well as the present user (tenant /lessee).

Appeal Process

All Municipal Acts have made a provision for appeal against the assessment. However, there is a difference between other tax regimes and the property tax. In other tax regimes like sales tax and income tax, assessments are generally concluded on a return based account-based system, where the role of the assessor is to verify the returns with reference to the accounts maintained by the assessee. In the case of property tax, the assessor determines the assessable value of the property and the appeal process gives taxpayers the opportunity to challenge the assessable value, on the grounds of reasonableness, if they so wish. Therefore, potentially every proposal for assessment of a property can become a subject of appeal.

With the recent self-declaration of property tax schemes adopted by various cities, the property tax assessment has become return based and automatically acceptable except for a small number (five to ten per cent) of cases selected for random scrutiny. However, as the predominant practice prevalent in the country is the assessment made by the assessor, the appeal system should be designed to facilitate the taxpayer's right to appeal. In a number of municipalities, appeal against the assessment made by the revenue officials/Commissioner lies before the Standing Committee consisting of elected representatives who decide the appeal by passing a resolution. Whatever be the system of appeal, currently many taxpayers across the country do not find the appeal mechanism fair and free from subjectivity. In such circumstances, it would be appropriate to create a separate Tax Tribunal or a bench in the State Appellate Tribunal to adjudicate the tax appeals.

b) Property Tax Administration

Property tax administration universally is problematic, more so in developing countries because of the lack of qualified staff, archaic style of record keeping coupled with low preference for technology, absence of effective interface with other governmental agencies and in some measure the lack of political will to enforce good governance. International experience has shown that successful property tax reform must be comprehensive, covering all aspects of property tax administration namely, coverage, valuation, collection, enforcement and taxpayer service. Before attempting any reform, if just coverage and collections are carefully monitored these could yield excellent results.

⁸ Rural local bodies.

⁹ The cities, for the purpose of property tax collection are divided into six zones, from A to F. A denotes the highest property values and F the lowest, thus property values systematically decline from A to F categories.

Coverage: Failure to list and assess all properties is one of the main causes of low tax yield. Comprehensive and periodic coverage of properties can broaden the tax base, enhance revenue and bring equity into tax administration. This can be achieved through carrying out field surveys, tax mapping and use of Global Positioning System. Self-reporting of property particulars by taxpayers, already in vogue in many cities where self-assessment scheme has been introduced can also be resorted to.

Billing and Collection: Assessment is a job half done. The circle gets completed only when the tax is actually collected and remitted. Property tax collection is particularly challenging in developing countries that do not have a culture of paying taxes fully and voluntarily. Reform efforts have shown that it is possible to improve collection efficiency by effective enforcement.

The poor collection efficiency has been attributed to:

- lack of taxpayer's confidence or understanding in how the tax is levied, collected and used,
- lack of appropriate collection and enforcement mechanisms and
- lack of political will.

Audit: Tax audit should be driven by the desire to capture maximum amount of revenue. Assessment files must be audited with cross-reference to information obtained from other departments and field surveys. Focus should be on large taxpayers, especially industrial and commercial establishments and also coverage of properties, particularly those that have escaped the tax net. Currently, audit systems are not well established in municipal bodies. This is an area that needs special attention including training of auditors.

Training and Human Resources Development: Administrative efficiency in ULBs has suffered on account of neglect of human resource development. Unlike in the Revenue Services at Central and State levels, the revenue staff in municipalities hardly receive any training. Reforms in tax systems should first be understood well by the officials in charge of implementing them. It would be useful for every state to set up a Municipal and Urban Training Institute to upgrade the skills of municipal officials.

c) Policy and Institutional Issues

In order to succeed and sustain, property tax reform will have to be considered in the context of overall reforms. Municipal revenues account for a paltry 0.6 per cent of the country's GDP. Given the encouraging growth of the urban economy, there is tremendous potential for enhancing local revenues. A strong institutional framework is essential to realise this potential and upgrade urban infrastructure. State Governments must decentralise adequate fiscal and administrative powers to ensure that finances match functions. Institutional capacity building is essential for effective delivery of urban services. Urban land policy reforms become important if the full value of urban property is to be captured. Stamp duty and registration charges need to be rationalised to minimise the temptation for under valuation. Policies relating to land use, especially in case of exemptions granted to certain uses, calls for a review.

8.3 CASE STUDY OF BRUHAT BANGALORE MAHANAGARA PALIKE (BBMP)¹⁰

In April 2000, the BBMP introduced an optional scheme of self-assessment of property tax (Vasantha Rao, 2009). Though this scheme was called Self-Assessment Scheme (SAS), it was in effect a self-declaration scheme. The scheme was made optional to avoid any legal dispute that may arise as the new scheme was brought about without amending the Karnataka Municipal Corporation Act.¹¹ This move to make it optional also was a testing ground for the acceptability of the scheme, which had spelt out parameters to show how the property would be taxed.

The city has been divided into six –land-value zones based on the published guidance value of the Department of Stamps and Registration for assessment purposes. The zonal classification referred to a land value category rather than to a contiguous area and hence, a street could fall in any zone in the municipality depending on the rental value assigned. For each of the zones, the rental rates per square foot were pre-determined. The property tax was linked to location, type and quality of construction as well as age of the building (property). The zonal classification applied to all residential properties and to one general category under non-residential property.

The scheme set out to make further distinction in the assessment of residential and non-residential use of property. This was done to

¹⁰ During January 2007, 7 City Municipal Councils, 1 Town Municipal Council and 110 villages were merged with Bangalore Mahanagara Palike to form the new Bruhat Bangalore Mahanagara Palike.

¹¹ Bangalore set in motion the property tax reforms in the year 2000 when it first brought the optional Self Assessment of Property Tax scheme. Under the scheme, the location of the property was classified into zones based on the published guidance value notified by the Department of Stamps and Registration. For each of the Zones the rental rates per square foot were pre-determined linking building to location, type and quality of construction and age of the buildings. The division of the city into zones was in effect the first level of reform to revalue properties on an annual rental base, but used an approach that features assessment under a capital value system.

maximise the assessment value of properties. All types of residential use of property were grouped into five categories while non-residential uses of properties were –grouped into eleven categories. Further, the expected rents were pre-determined for the category of usage depending on their zone for rented as well as self-occupied properties. However, in respect of ten non-residential uses, the rental rates were fixed without reference to any zonal category.

The reform processes were also politically sensitive. A cap on the property tax increase was set at 2.5 times the existing tax liability to reduce any undue burden on the taxpayers and make the scheme widely acceptable. About two-thirds of the taxpayers reached this cap. The Unit Area-based Method (UAM) increased revenues significantly. In its first year, after the launch of the reform, Bangalore's property tax collection increased by 33 per cent. Also, reduction in compliance costs saved the taxpayers from harassment of the officials, who under the cover of the previous opaque system of assessment, forced taxpayers into 'negotiated' property tax liability. Since most taxpayers did not feel the need to 'negotiate' with officials any longer, they were prepared to pay two-and-half times the tax paid previously. Further, a well-designed education programme, that included providing several help centres, helped the citizens to understand the reform. Also, senior officers met various citizen groups to convince them of the benefits of this programme, which in the long run would outweigh the increased tax burden. The local media backed this initiative and several leading dailies carried a column on clarification of the citizens' doubts about the scheme.

In the year 2002, Karnataka Municipal Corporations Act was amended to introduce the Capital Value System (CVS) for assessment of property tax. The amended method of property tax assessment by capital value method was introduced in all the ULBs except

the Bangalore Mahanagara Palike (BMP) since the taxpayers of Bangalore protested against its implementation, as they feared that a valuation by market value would increase the property tax abnormally. Therefore, BMP continued with the prior method while the other ULBs introduced the CVS.

An administrative change in jurisdiction of Bangalore and adjoining ULBs in January 2007, however, paved the way for introduction of Capital Value System in Bangalore city. Seven City Municipal Councils, one Town Municipal Council and 110 villages were merged with Bangalore Mahanagara Palike (BMP) to form the new Bruhat Bangalore Mahanagara Palike (BBMP) in the year 2007. While the municipal and Town Councils were collecting property tax under the Capital Value System scheme, Bangalore Mahanagara Palike still followed the Annual Rental Value system. With the merger of the City and Town Municipal Councils with BMP, there came up a problem of parallel existence of two different methods of property tax assessment.. This called for bringing uniformity in tax administration across ULBs. Widespread resistance was reported from the taxpayers for moving to a Capital Value System. Therefore, the BBMP was forced to concede to the people's request and amended the Act to introduce United Area-based Method of property tax assessment with the principles of Capital Value System inbuilt in it for the whole of BBMP.

Rational for adopting the area-based system

The post-2007 property tax reform adopted the following pragmatic methods for valuation:

- a) Pre-determined value per square foot of build up area depending on location of the property.
- b) Cost of construction of building depending on roof type or its usage.

This method was defined as "Unit Area Value" (UAV) as the unit of valuation was on square foot basis, depending on the location. The property tax payable under the self-assessment scheme was based on the formula driven calculation depending on the location as under (for residential property):

$$pt = rv * 20\% + 34\% \text{ cess}$$

$$rv = ba * (zrr * 10m) - d$$

(Where *rv* is ratable value, *ba*=Built-up area, *zrr* = zonal rental rate fixed/sft/month *m*=months, *d*=depreciation, *pt* = property tax, and 20 per cent = tax rate).

Unit Area-based Value has been defined as the average expected market rate per square foot/ square meter per month that a property would command in a given locality, on the basis of the quality of the building, age and such other criteria. The Act provided the Commissioner of the ULB to fix the average market rate for different areas or streets and for different classes of buildings, as well as vacant land, by data gathered through reliable sources considered as reasonable and sufficient. Taxpayers accepted the new tax policy as they found that the new system was similar to the old SAS of 2000.

In determining the valuation, objectivity was ensured by basing the classification on the published guidance value of the Department of Stamps and Registration. Each value band became a Value Zone. After seeking public opinion/objection, six value zones within the BBMP jurisdiction were finally notified. Based on the roof type or usage, the average expected rates of lease/ mortgage/rental properties were fixed. Five categories were notified under residential use. Similarly, all commercial and non-residential properties were categorised based on Value Zone, although, eleven categories of non-residential buildings were outside the Value Zone.

The tax rate prevailing in the year 2000 was not altered and was maintained at 20 percent for residential and 25 percent for non-residential

to make the new policy acceptable to the taxpayers. The 2.5 times cap that existed in the SAS 2000 scheme was, however, removed and all property owners had to pay as per the rates fixed.

However, new categories were carved out depending on the usage and type of construction. An incentive for early payment in the form of a rebate of 5 per cent and a penalty interest at 2 per cent per month for late payment was provided in the Act. Also, owner occupied properties would get 50 per cent rebate. This rebate was not available for non-residential properties though self occupied. Depreciation was provided for the age of the building to a maximum of 55 per cent. Further, there was the provision of mandatory annual filing of returns with random check of 15 per cent of the returns filed. The Act has made it mandatory for the Commissioner to revise the valuation of all properties once in 3 years by 15 per cent.¹²

Reasons for success

The property tax collection of BBMP nearly doubled between 2007-08 and 2008-09 and is expected to increase further. Under the new scheme, BBMP was able to increase its property tax collection as several properties shifted from a lower zone to a higher zone, although there was no increase in the rental rates. The minimum increase in such shift would be by 15-20 per cent. Properties in over 10,000 streets moved from a lower zone to one zone higher. This zone classification was made as scientific as possible and every street in the jurisdiction was physically tracked, following which the zonal location was fixed. Also, the new Act brought exempted properties into the tax net. The new law prescribed that all properties exempted from property tax under the Act were obliged to pay service charges at 25 per cent of the rates fixed for such

¹² The Council could however revise up to 30 per cent for any class of property. The revision will be on the base year 2008-09.

properties. Further, it became mandatory for all unlawful properties to file their returns and pay property tax.¹³

BBMP undertook a simple GIS mapping of all the properties within its jurisdiction.¹⁴ It used the GIS map to place all the returns particulars in the geo-reference in the base map. Hence automatic notices could be generated for those properties that remained blank in the GIS map. The taxpayers were informed of this initiative of BBMP. This encouraged them to file their returns.

The BBMP adopted the GIS supported Unit Area-based Method of taxation in March 2009, which helped it to assess 100 per cent of the properties. Prior to this, manual assessment of properties led to under assessment of properties. About 70 per cent of the assessed property owners paid taxes, their share increasing from 68.5 per cent to 73 per cent between 2004-05 to 2007-08 (see Table 8.1). During the last four financial years, the percentage of defaulted properties registered a decline. The disputed and exempted properties, which formed a very small share of the total properties, also registered an increase. These temporary fluctuations are characteristics of any city in a transitory phase of reform.

In India, the non-notified slums do not pay property tax. In 2004-05, less than one per cent of the properties belonging to the poor were assessed, the figure increased to 2.3 per cent in 2007-08 (Table 8.2). It is disturbing to note that a very small percentage of the slums were connected to municipal services. However, over 90 per cent of the slums were found to be paying charges for municipal services.

¹³ Over 1,500,000 unlawful properties have filed their return during the year 2008-09. There may be another 200,000 more such properties that are still to come under the tax net.

¹⁴ The GIS map has identified 1.7 million properties. However, nearly .3 million properties are identified either as slums, State and Central government buildings.

TABLE 8.1 BANGALORE - CHARACTERISTICS OF ASSESSED PROPERTIES

CHARACTERISTICS OF ASSESSED PROPERTIES	2004-05	2005-06	2006-07	2007-08
Percentage of properties assessed to total number of properties	90.58	90.21	88.55	69.23
Percentage of assessed properties that paid taxes to number of properties assessed	68.54	66.55	87.64	73.06
Percentage of assessed properties which defaulted to number of properties assessed	31.46	33.45	12.36	26.94
Percentage of assessed properties that disputed to total property assessed	0.04	0.05	0.05	0.07
Percentage of total exempted properties to total properties assessed	1.86	2.06	2.18	3.82

Source: Budget documents of BMP

TABLE 8.2 BANGALORE - CHARACTERISTICS OF ASSESSED SLUM PROPERTIES

CHARACTERISTICS OF ASSESSED SLUM PROPERTIES	2004-05	2005-06	2006-07	2007-08
Percentage of properties belonging to disadvantaged categories to total properties assessed	0.88	1.02	1.12	2.33
Percentage of properties not counted or enumerated for purpose of taxation to total properties assessed	0.22	0.21	0.21	0.21
Percentage of slum properties connected to municipal services to total properties assessed	0.80	0.93	1.05	2.06
Percentage of slum properties paying charges for water and other services to total number of slums	91.74	90.91	93.33	88.10

Source: Budget documents of BMP

Table 8.3 indicates that property tax as a percentage of total revenue receipts as well as total receipts registered a decline during 2004-05 to 2007-08 for BBMP. This may be attributed to the decline in the domestic collection. Non-domestic collection, however, registered an increase along with the arrears (Table 8.4).

The zoning of the city of Bangalore based on guidance value, reduction in compliance costs, elimination of exemptions to property tax payment, transparency in the SAS, etc., were some of the strengths in the system that helped property tax collection to increase substantially in the city.

TABLE 8.3 BANGALORE - PERCENTAGE COMPOSITION OF PROPERTY TAX

PERCENTAGE COMPOSITION OF PROPERTY TAX	2004-05	2005-06	2006-07	2007-08
Percentage of property tax to total revenue receipts	63.66	48.38	50.97	33.67
Percentage of property tax to total revenue receipts (tax)	85.11	85.51	84.52	58.71
Percentage of property tax to total receipts	29.36	34.18	30.84	23.09
Revenue receipts (Tax)	359.99	414.60	550.66	921.80

Source: Budget documents of BMP

TABLE 8.4 BANGALORE - CHARACTERISTICS OF PROPERTY TAX COLLECTION

CHARACTERISTICS OF PROPERTY TAX COLLECTION	2004-05	2005-06	2006-07	2007-08
Percentage of current domestic collection to current domestic demand	80.00	82.95	82.51	52.65
Percentage of current non domestic collection to current non domestic demand	82.29	61.17	95.20	97.52
Percentage of total current collection to total current demand	80.84	74.91	87.07	75.86
Percentage of arrears domestic collection to arrears domestic demand	50.00	72.00	68.42	77.42
Percentage of arrears non domestic collection to arrears non domestic demand	60.00	81.25	128.57	78.38
Percentage of total arrears collection to total arrears demand	53.85	75.61	84.62	77.94
Percentage of total collection to total demand	77.33	75.00	86.75	76.10
Percentage of estimated expenditure on property tax assessment, billing and collection to total current collection	0.14	0.15	0.12	0.13
Percentage of estimated expenditure on property tax assessment, billing and collection to total collection	0.13	0.13	0.10	0.11

Source: Budget documents of BMP

8.4 CASE STUDY OF AHMEDABAD MUNICIPAL CORPORATION

The Ahmedabad Municipal Corporation (AMC) initiated reforms in a phased manner in order to minimise the legal and administrative challenges associated with reforms. In the first phase, a number of effective steps were taken to increase property tax collection. First, the municipal records of properties were updated with an addition of a large number of previously unrecorded properties. Next, reassessment of all existing properties whose assessed value was grossly inadequate was initiated. Finally, punitive actions like disconnection of water supply and drainage services; attachment of movable and immovable properties; and occasionally auction of properties for tax recovery were taken against property tax defaulters.

In the second phase of reforms, the AMC decided to replace the existing system based on Annual Rental Value by an “area-based property tax system”. Nearly one million properties were surveyed in an elaborate exercise involving large-scale survey throughout the city and computerization of data.

Further, certain amendments had to be made to the existing Bombay Provincial Municipal Corporation Act (applicable to Gujarat) to accommodate the new system.¹⁵ AMC has amended the Act in 2002 to include a provision for switching to the old rent based method as well. Thus, property tax can either be collected by Rateable Value-based system or by Carpet Area-based system. Under the new method, the property tax is computed by applying a per unit tax rate to the total carpet area of the property with adjustment for location, age, type of use and whether the property is owner or tenant occupied.

¹⁵ AMC became the first Municipal Corporation in India to adopt the amendment (PT Reforms in Ahmedabad, PT Department, AMC).

Section 141-B (1) of the BMPC Act, 1949 (amended in Gujarat Act 3 of 1999) provides that property tax shall be levied annually on buildings and land on the basis of the rate per square meter of the carpet area. Multiplying factors weighted for:

- Location: (four gradations based on land value)
- Age: (five gradations)
- Residential properties: Type of building (five gradations)
- Non-residential properties: Use of building (six gradations)
- Occupancy: (Self owned/tenant)

Any addition to building was to be treated as separate unit for assessment.

Property Tax = Area X Rate X Location factor X Age factor X Type of building or use factor X Occupancy factor.

The effective functioning of the new system was dependent upon regular updating of the property records and guidance values. In the present property tax system, exemption is applicable for only the area of sanctorum in religious places. However, such properties have to pay water and sewerage charges. Also, for any unused building, 3/4 property tax is exempted.

The AMC is in the process of complete adoption of the GIS supported UAM of taxation. During the last four financial years, the percentage of defaulted properties declined (see Table 8.5) while the percentage of assessed properties that paid taxes increased. The disputed properties, which formed a very small share of the total properties, registered a decline. In Ahmedabad, the non-notified slums do not pay property tax (see Table 8.6). It is disturbing to note that only about 20 percent of the slums were connected to municipal services. However, the slums do not pay charges for municipal services.

TABLE 8.5 AHMEDABAD - CHARACTERISTICS OF ASSESSED PROPERTIES

CHARACTERISTICS OF ASSESSED PROPERTIES	2004-05	2005-06	2006-07	2007-08
Percentage of properties assessed to total number of properties	100.00	100.00	100.00	100.00
Percentage of assessed properties that paid taxes to number of properties assessed	36.62	40.75	43.87	55.08
Percentage of assessed properties which defaulted to number of properties assessed	55.49	49.25	45.38	37.00
Percentage of assessed properties that disputed to total property assessed	4.73	6.82	7.69	5.45
Percentage of total exempted properties to total properties assessed	3.16	3.18	3.05	2.47
Percentage of properties whose values are below a certain threshold to total properties assessed	0.13	0.30	0.31	0.57

Source: Budget documents of AMC

TABLE 8.6 AHMEDABAD - CHARACTERISTICS OF ASSESSED SLUM PROPERTIES

CHARACTERISTICS OF ASSESSED PROPERTIES	2004-05	2005-06	2006-07	2007-08
Percentage of properties belonging to disadvantaged categories to total properties assessed	0.00	0.00	0.00	0.00
Percentage of slum properties connected to municipal services to total properties assessed	17.77	17.73	19.21	15.19
Percentage of slum properties paying charges for water and other services to total number of slums	0.00	0.00	0.00	0.00

Source: Budget documents of AMC

The per capita tax receipts showed an increasing trend even in real terms during 2004-05 to 2006-07. In 2007-08, it registered a decline, which may be attributed to the abolition of octroi in the state. Table 8.7 indicates that property tax as a percentage of total revenue receipts registered a decline during 2004-05 to 2007-08 for AMC.

However, property tax to total receipts remained constant at around 37 per cent. Property tax as a percentage of total revenue receipts registered an increase during 2004-05 to 2007-08 for AMC. This may be attributed to the increase in the domestic and non-domestic collection of the corporation (Table 8.8).

TABLE 8.7 AHMEDABAD - PERCENTAGE COMPOSITION OF PROPERTY TAX

PERCENTAGE COMPOSITION OF PROPERTY TAX	2004-05	2005-06	2006-07	2007-08
Percentage of property tax to total revenue receipts	20.06	21.35	18.57	17.57
Percentage of property tax to total revenue receipts (tax)	25.46	25.61	23.60	31.33
Percentage of property tax to total receipts	37.52	37.50	49.01	37.74
Revenue receipts (Tax)	1283.38	1403.15	1595.17	1161.30

Source: Budget documents of AMC

TABLE 8.8 AHMEDABAD: CHARACTERISTICS OF PROPERTY TAX COLLECTION

CHARACTERISTICS OF PROPERTY TAX COLLECTION	2004-05	2005-06	2006-07	2007-08
Percentage of current domestic collection to current domestic demand	52.53	56.80	59.66	61.34
Percentage of current non domestic collection to current non domestic demand	49.19	57.82	58.59	62.47
Percentage of total current collection to total current demand	50.01	57.57	58.83	62.17
Percentage of arrears domestic collection to arrears domestic demand	6.34	7.56	9.68	11.06
Percentage of arrears non domestic collection to arrears non domestic demand	9.95	13.41	14.80	12.74
Percentage of total arrears collection to total arrears demand	8.87	11.65	13.25	12.20
Percentage of total collection to total demand	14.41	18.26	20.83	22.21
Percentage of estimated expenditure on property tax assessment, billing and collection to total current collection	7.58	7.40	6.07	6.31
Percentage of estimated expenditure on property tax assessment, billing and collection to total collection	3.54	3.36	2.85	3.54

Source: Budget documents of AMC

The initial drive of AMC to increase the coverage of properties in the tax net and penal actions against defaulters resulted in doubling the tax revenue within two years. The de-linking of property tax from the Rent Control Act, removal of assessment dispute, procedures, and elimination of exemptions were some of the strengths of the new system. Self-assessment of properties led to curbing of corrupt practices. Further, there was a flexibility of increasing the tax rate every year. Also, because of the increased level of transparency, the number of litigations has become nil.

8.5 CONCLUSIONS AND THE WAY FORWARD

Most ULBs in India have accepted the government's recommendation for adoption of a formula based system of property tax collection, which minimises discretion and is capable of self-assessment. Sustaining the reform would mean calibrating the rates at periodic intervals, removing inequities, periodic evaluation of the system, ensuring cost-effectiveness and ensuring taxpayers service and education. The UAM, which is a simple arithmetical system of calculation of property tax, is seen in both Ahmedabad and Bangalore. Ahmedabad has implemented UAM on the basis of rate per square meter of carpet area from 2001-02, while Bangalore has implemented the area-based assessment in 2009 where the revaluation of the properties in the city zones is on an annual rental base but the approach features assessment under a capital value system. Further, Bangalore is the only city, which has introduced an inbuilt elasticity in revenue generation.

Ahmedabad has a progressive scale of tax rate, where categorization of residential and non-residential rates has been differentiated. Bangalore has a flat rate of tax where 20 per cent is charged on residential properties and 25 per cent on non-residential properties along with a

34 per cent cess on property tax in both cases. Exemptions provided in the Act in many states often provide loopholes in the tax structure for avoiding tax. In Ahmedabad, exemptions are given only to religious places but they have to pay water and sewerage charges. In Bangalore, among others, exemptions apply to charitable institutions, orphanages, hospital, educational institutions (but not residential quarters) and public worship places.

Many of the existing administrative and tax information systems, which can undergo improvements (to increase revenue from tax), often do not require legislative change or large investments. A centralised property information maintenance system, which gives an identification code to each of the properties and facilitates the process of crosschecking the defaulters (making the system more efficient), is present in Ahmedabad. A full-fledged GIS powered property tax database will be operational by 2009-10 while in Bangalore the database of all properties within the city's municipal limits through GIS mapping has been completed. Bangalore has shown that even in an area based system there can be revenue potential. It is not necessary to move into a Capital Value system of assessing the property, as recalibration of the zones would yield sufficient buoyancy to the tax.

Political support is the *sine qua non* for the success of any reform process. A highly visible tax like property tax involves a diversity of interests covering various sections of the population. It is, therefore, essential to gain political acceptance for the reform measures both at the state and the local government levels. People understanding the benefits of reform can go a long way in ensuring voluntary compliance. That perhaps is the ultimate test of a good tax system. Further efforts must be taken to introduce pro-poor budgeting to ensure balanced development of cities.

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09 TAXATION AND SUSTAINABLE DEVELOPMENT IN THE UK

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Abstract

This chapter is about the effects taxation can have on sustainable development and how land is used. Based on information and experience from the United Kingdom, it focuses on the different effects taxing labour and capital can have, instead of taxing land, by explaining the adverse effects of concentrating taxes on these matters and how they encourage speculation in land and the withholding of land from productive use. Such taxes are identified as discouraging urban regeneration and encouraging urban sprawl with a number of adverse consequences leading to less efficient, less effective and more damaging environments which are unsustainable. As part of this process the chapter appraises the effects this has on town planning in trying to overcome the adverse effects that are identified. The conclusion is that it does not succeed and that town planning actually helps to make things worse. In contrast, if taxation is shifted towards land instead of labour and capital the effect is to create more efficient, more effective and more equitable environments. Importantly, it would encourage sustainable development, urban infrastructure development and service delivery. It would also help rather than hinder the aims and objectives of town planning.

Keywords: *Land value taxation, town planning, sustainable development*

9.1 INTRODUCTION

The purpose of this chapter is to explore the ways in which taxation and land use planning can affect how land is used. The underlying assumption is that a system of taxes which targets labour and capital and not land creates distinct disadvantages for the way land is used creating disadvantages for all. The issues are whether land use planning, or town planning as it is usually referred to in the United Kingdom, either adds to or subtracts from these disadvantages and, if the latter, how the situation could be improved.

The investigation starts by explaining the importance of land as a distinct factor of production which leads to a critique of the existing tax system to show how it affects the use of land. This is followed by an assessment of how land use planning in the United Kingdom (UK) responds to these effects. It then proceeds to identify the potential benefits of a tax shift towards land and the implications this has for sustainable development.

For clarity, where reference is made to sustainable development this is generally taken to mean the Brundtland definition which states that for development to be sustainable it should meet the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987). References to town planning and urban planning are simply other names for land use planning and references to property or landed property should be read as including both buildings and the land on which they are situated. As explained in more detail later, property consists of two factors of production, namely land and capital.

9.2 THE IMPORTANCE OF LAND AS A FACTOR OF PRODUCTION

For the purposes of this chapter, land is given its economic meaning in that it is simply the natural resource (including water) upon which all human life depends. It does not include any buildings or other man-made improvements and is a distinct factor of production separate from labour and capital. Buildings and other improvements affixed to land are classed as capital either to be enjoyed as wealth (e.g. as a home) or used in the production of further wealth (e.g. as a factory).

This distinction between land and capital is important because it means that property consists of two separate factors of production and that, as a result, the value of any property will be the product of these two distinct factors. Writers such as Gaffney (1994), George (1979) and Harrison (1983) stress that the land element of value is created by the community at large and that the capital element depends on what is built on each site and is unique to it and the landowner. Owner in this sense includes any public or private sector organization although how they might wish to capitalise on this ownership is another matter. At this stage it is sufficient to report that the economic argument is that if property taxes are based on land and not capital then the community would recoup what it has created and not take from the capital element which is private and created by the landowner. At present the situation is largely reversed. The community does not recoup what it has created; it largely goes to the landowner instead. This may not seem important but it is because if land is taxed rather than buildings it will affect the demand for and supply of land, the price people will pay for it (and property) and how land is used and developed.

Part of the thinking about producing different results stems from the fact that land has no cost of production unlike capital and labour.

Taxing it cannot therefore add to the cost of production because there is no cost to add to. The returns to land are therefore a surplus with no effect either way apart from the current situation where it is received by the landowner rather than the community. In comparison, taxing capital (e.g. buildings), or labour, adds to the cost of production which generally has the effect of raising costs and reducing supply. To continue the analogy, there would be fewer buildings. On the other hand, apply charges to the land and this would encourage more land to be made available for productive use.

In the UK, no distinction, for taxation purposes, is made between the two elements of property value. Instead, a charge is applied to the rateable value which is derived from the combined value. For domestic property it is known as the Council Tax and for non-domestic property it is the Uniform Business Rate. Both include land and building value in the assessment but the rate is generally only paid if the buildings are occupied and is paid by the occupier. If the building is under-occupied (as many are) and/or if the building is deteriorating, then the rating assessment is depressed indicating that rates are targeted primarily at buildings. Under occupied in this sense usually means either that only part of the premises are occupied or that all or part are not permanently occupied (e.g. the normal occupier is in hospital or in detention or it may be a holiday home, etc.).

Examples of liability to Council Tax are shown in Table 9.1 from which four points need to be made about these property taxes on residential property:

1. Each figure relates to the value of the property as a whole, that is, they incorporate both the land and capital elements of value. If the land element of value was calculated then, using the same model, it is possible that the liability to tax would be reduced.

2. The price actually paid for property will nearly always be less than the asking price but the council tax will most likely remain the same due to the system of tax banding that is used.
3. The liability to tax (between 0.003 and 0.007 percent of value) compares very favourably with taxes on goods and services (VAT) which are currently 17.5 percent (2010) and with income tax where the main bands are 20 and 40 percent of gross income.
4. The liability to tax between the different properties above, whilst negligibly different in percentage terms (from 0.003 to 0.007), differs substantially as a proportion of property value. For example, the council tax payable on the £700,000 property is $1/359^{\text{th}}$ ($700,000/1948$) the value of that property whereas the tax payable on the £129,500 property is $1/128^{\text{th}}$ ($129,500/1007$) its value. In other words, proportionality increases as property prices decrease.

It can be seen, therefore, that property (and land) is virtually tax free rather than not taxed at all. As reported below, this has adverse consequences for how land is used.

9.3 THE EFFECTS OF THE EXISTING TAX SYSTEM IN THE UK

Taxes in the UK are targeted primarily on labour, the production of goods and services and not land. No differentiation is made between the two elements of property value which creates a number of adverse consequences for society, sustainable development and the provision of urban infrastructure. The main effects relevant to this chapter relate to the following.

TABLE 9.1 EXAMPLES OF LIABILITY TO COUNCIL TAX

	Type of dwelling	Council tax Payable (£ per annum)	Asking market price	Tax as a percentage of market price
EDINBURGH	5 bed detached	1948	700,000	0.003
	2 bed terraced	1039	175,000	0.006
SALFORD	4 bed detached	2519	459,000	0.005
	2 bed house	1007	129,500	0.007
NEWBURY	4 bed detached	2196	675,000	0.003
	2 bed semi	1520	217,500	0.006

Source: Local Authority records and Estate Agents websites

9.3.1 Existing taxes encourage speculation in land

With land and property largely untaxed, as revealed above, this increases interest in land. This is irrespective of whether or not it has buildings on it because, being fixed in supply and location, this increased interest has the effect of making land more expensive. This is the cause of speculation and why land, and hence landed property, is an attractive investment. This alone encourages speculation but it is a continuous process. Demand is artificially inflated because of the advantages to be gained from acquiring land which remains largely untaxed.

Speculation in land, however, can and does rise and fall according to the state of the economy. In times of growth the gains can be substantial, as witnessed by the enormous profits that have been realised over the last two decades (see below). But in times of recession, when it might be thought that speculation disappears, the situation is somewhat different. It diminishes rather than disappears because the lack of a tax on land maintains interest in it and a reduction in supply (with fewer properties brought onto the market) helps to counteract against the reduction in demand. In

addition, in the knowledge that prices will rise in the upturn, speculators will, if they can, wait until they think prices have fallen sufficiently for it to be worthwhile to invest again. As land is fixed in supply and location and because the market is very imperfect (i.e. there is a lack of knowledge of others' intentions) this limits the opportunities to purchase land and property before other speculators step in. This, in effect, encourages speculation.

Two further matters are worth mentioning at this point. These are that deregulation, which has enabled banks to massively over lend on landed property, and information technology, which enables money to be transferred freely around the world, have both helped to increase local demand for property. This, in turn has increased property values and helped reinforce speculation in land.

9.3.2 Existing taxes have an inflationary effect

Investing in landed property is expensive and involves vast sums of money and capital, most of which goes into land and existing bricks and mortar. This, by itself, produces very little tangible wealth although it substantially increases the volume of money in circulation.

Thus, as more money is invested in land and property, especially existing property, it increases the disparity between real wealth and the supply of money in circulation, thereby contributing to inflation. What the lack of a tax on land does is help increase this disparity.

9.3.3 Existing taxes encourage the withholding of land from improvement

Arising from this speculation and the corresponding inflationary effects of the tax system, the value of land generally increases year on year which induces landowners to withhold land (and property) from the market. Indeed, it creates an incentive to hold on to land without improving or developing it because gains can be made simply by retaining possession. As the Henry George Foundation (HGF, 2002) has pointed out, when land (and property) values are rising there is less incentive to sell or develop today.

The result is many derelict, vacant and under used sites as witnessed in many towns and cities throughout the UK. For example, in Scotland in 2008 there were 207 hectares (ha) of vacant and derelict land in Edinburgh whilst in Glasgow there were 1325ha (Scottish Government, 2009). In England, in 2007 there were 305ha of derelict and vacant land in Salford (northwest England) whilst in Horsham (in the more prosperous southeast of England) there were still 64ha (Department for Communities and Local Government, 2008). What these examples show is that derelict and vacant land is not confined to depressed areas but attractive and prosperous locations as well. Admittedly there will be different reasons for this dereliction but the withholding of land for the reasons stated above will be one of them.

9.3.4 Existing taxes help increase land and property values

Unsurprisingly the combined effects of the above have had a substantial and significant

effect on land and property prices as figures from the UK Valuation Office Agency (VOA) reveal. For example, between 1982 and 2001 average house prices for 100 towns and cities in England increased from £27,150 to £122,170, that is, 4.5 times the 1982 figure or a 450 per cent increase.

Choose other periods over similar time frames and the percentages will differ but they all point to house price rises far above the reported rate of inflation.

But these average figures hide the true picture. Delve further into the VOA figures and we find that there were huge locational variations in house price rises during this 19-year period. For example, in St Albans (southeast England), pre 1919 terraced houses increased in value from £30,000 to £225,000 (an increase of £195,000 or 650 per cent over the 1982 figure) whereas in Grimsby (Humberside), similar houses increased from £9,000 to £27,000 (an increase of £18,000 or 200 per cent). The increase in value in St Albans for terraced houses was therefore 11 times higher than the increase in Grimsby, that is, 1100 per cent (£195,000 compared to £18,000) (values extracted from Valuation Office Agency figures for 1982 and 2001).

For post-1960 detached houses different figures emerge. In St Albans the increase for this same period was from £70,000 to £395,000 (an increase of £325,000 or 464 per cent) whereas in Grimsby it was from £35,000 to £110,000 (an increase of £75,000 or 214 per cent). The difference between the increases for detached houses in these two towns was £250,000 (£325,000 less £75,000) or a 333 per cent increase). Thus the percentage increase for these larger dwellings was much smaller whilst the capital increase was much larger indicating that reliance on percentage changes can be misleading. It is the capital increase that is important as explained below.

These two examples do not reflect the full range of differences in increases in value in England. There are towns where the increases are less than in Grimsby and greater than in St Albans. The point about these differences, however, is that they highlight two things. One is the increase in inequality arising solely from location and the other is the difference in purchasing power arising purely from the increases in values. Clearly the owners of larger properties in certain locations have benefited (and still benefit) at the expense of others because it has provided them with substantial and much larger increases in collateral. It means that they can invest more easily in additional property either for their own use (e.g. as a second home) or as an investment (e.g. the buy-to-let market) or for other purposes. Overlending, of course, not only increased opportunities for those with additional collateral, it made others, as we now know, more susceptible to defaulting on their loans.

In terms of land use several implications arise from these increases in property values. For instance:

- they make it increasingly difficult for first-time buyers to get into the housing market;
- they increase the reliance for more and more people to rent or to rely on family and friends for financial support or to move elsewhere to find suitable housing (and jobs);
- they exacerbate local housing markets in the more attractive and more expensive areas (e.g. Bath, Cornwall, the Cotswolds etc. in England) which attract second home buyers at the expense of the indigenous population. Note too that globalisation and information technology can further exacerbate this situation because they increase the number of potential purchasers from around the world; and

- these increases in value create the opposite effect in run-down areas. There is less interest because potential gains are much smaller. Households who would like to relocate are unable to do so because of a lack of demand, lack of capital and a lack of collateral. A downward spiral of neglect occurs.

But property price rises are not confined to dwellings. Non domestic properties also increased in value with similar consequences arising for businesses and other organizations. The New Economics Foundation (NEF), for example, reported that rising rents, among other things, resulted in:

- the number of businesses selling food, tobacco and beverages falling by 37 per cent between 1994 and 2001;
- independent butchers decreased from 23,000 in 1985 to 9,721 in 2000 (a 60 per cent reduction);
- the number of pubs fell by 6.5 per cent between 1990 and 2000; and
- in 1981 there were 22,000 post offices in Britain but by 2001 the number had fallen to 17,846 (NEF, 2002).

These are just some of the negative effects of rents on property but these occurred in the good times before the recession. The situation now is worse and reported to be getting more so (KPMG/Synovate Retail Think Tank, 2009) with 135,000 retail premises in the UK expected to be empty by the end of 2009 (Kochan, 2009).

9.3.5 Existing taxes encourage urban sprawl

Another effect is to increase urban sprawl, that is, the continuing outward spread of towns and cities into the surrounding countryside. The inflationary effects of existing taxes which make it more expensive to develop land, together with the withholding of urban land from development, require developers

to continually look for ways to keep costs to a minimum. One important way is to build on greenfield sites (those which have not previously been developed) on the edge of towns and cities. This is because land in these locations is generally cheaper to buy, taxes are often lower, site preparation costs are much less and it is easier and cheaper to fit sites to buildings than buildings to sites.

Sprawl, however, by increasing the geographical spread of urban areas, results in several adverse consequences. First, many facilities and services become less and less convenient. Average distances between dwellings, shops, offices, meeting places, places of entertainment and many other uses and activities generally increase with the result that many premises tend to be visited less frequently. This makes it more difficult for many local businesses to compete. Reference has already been made above to many shops, post offices, pubs and other institutions closing down but this is a continuing process made worse by a number of factors including reduced custom and increased sprawl. Significantly this was the situation before the recession and now it is getting worse (Kochan, 2009).

Second, sprawl makes urban areas less attractive. Quality urban living is where peoples needs associated with home, work and play should easily be met and where there is a variety of social, cultural, leisure and other activities conveniently available. These should yield an urban fabric of not just dwellings, shops, offices and workshops but also meeting places (like pubs and restaurants), parks, sports facilities and much more. Variety and the opportunity for social intercourse within a quality architecture (both old and new) are the key where all interests and activities are easily accessible, either by walking or by efficient, effective and cheap public transport. This is what urban living should be about. Sprawl reduces this possibility.

Third, sprawl adds to the transport problem. As urban areas increase in size so average journey times and distances increase. Sprawl also disperses destinations which increases traffic over ever wider road networks. It makes it increasingly difficult to service them all by public transport and discourages greener modes of travel such as walking and cycling. The outcome is increased dependency on the motor car but this does not apply simply to those living in the new suburbs. It also applies to many residents elsewhere within the established urban fabric because many facilities and services have closed down or moved to the edge of town and are not as accessible.

This increasing dependency on the car, of course, also increases the need for parking. New businesses know that to maximise custom there needs to be adequate and preferably free car parking space nearby which additionally favours out-of town locations where sites and the road network can be designed to accommodate the car more easily. Witness the retail parks and supermarket developments with their acres (hectares) of car parking although witness also the large tracts of land which are required solely for this purpose. This, in fact, is a good example of sprawl feeding upon itself. By increasing dependency on the car more land is required to accommodate the car which increases sprawl even more. It all adds to problems of traffic congestion, more road accidents, increased pollution and loss of countryside. It is an unsustainable situation created, in part, by the existing tax system.

Another effect is that sprawl substantially increases the cost of new and existing transport infrastructure. For this to be effective it must serve larger geographical areas and will therefore cost more to construct, operate and maintain although, in addition, the inflationary effect of existing taxes will ensure that costs rise. Not surprisingly regional government such as the South East of England Regional Assembly (SEERA, 2002) recognised

this by indicating that 'selectivity' will have to be introduced. This means that only the more urgent improvements will be undertaken with further consequences for traffic congestion, road accidents, pollution and maintenance of existing networks and for other necessary improvements. This, of course, would apply to both existing and new urban areas.

9.3.6 Existing taxation adversely affects the economy

A further concern is the effect the existing system of taxation has on the economy. This arises from the fact that all wealth is distributed to the three factors of production. Increase the proportion to one, namely land, and less can be distributed to the other two, labour and capital. In addition, the return to land (economic rent) is a primary charge and has to be paid first (George, 1979 and MacLaren, undated). This means that when the proportion going to land increases, as the examples above show, the money available for everything else is less; there is less for wages, less for manufacturing, less for public services, less for the production of goods and services, less for new development and less for the creation of further tangible wealth. It also means that as more and more money is invested in land society becomes less productive. This was the case before the recession and it remains to be seen how circumstances might now improve.

Relate this to how land is used and developed and a range of effects can be identified. One is cost savings on new development which tend to be at the expense of design, innovation, materials, plot and room sizes etc. Second it encourages developers to maximise gross development value through more floorspace and more ground cover in a variety of locations, not all of which are suitable for such increases. Third, it encourages greenfield development which reduces the scope for urban renewal which, in turn, discourages investment in many areas and leads to urban decline. Fourth,

it makes it harder for many smaller businesses to compete as witnessed by the increasing number of vacant business premises in towns and cities. Finally, arising from the above, it frequently leads to a spiral of neglect in many urban areas which generates a host of adverse social, physical and economic consequences.

9.3.7 Existing taxes add to municipal and infrastructure costs

A related concern is that the existing tax system adds considerably to municipal, utility and infrastructure costs. This arises through its inflationary effect but the situation is made worse when urban expansion occurs. This is because operating distances are increased over wider geographical areas for services such as water supply, sewerage, refuse collection, fire protection, street cleaning, bus services, gas and electricity supplies, police and health care. But operating costs are also increased within existing areas. For example, water must be pumped under greater pressure to reach outlying areas which can result in leaks, especially in older water supply systems. Sewer sizes may also need increasing at extra cost in order to avoid overloading and flooding. The inflationary effect of the current tax system also ensures that associated costs will rise as well.

Similar concerns apply to the provision of new infrastructure such as roads and railways. This is because the existing system of taxation ensures that land becomes more expensive because of the artificial increase in demand that it creates together with its on-going inflationary effects. This in turn increases compulsory purchase and compensation costs so that the taxpayer pays twice; first by a system of taxes which raises costs and second, by paying higher prices to acquire land.

9.3.8 Existing taxes hinder the aims and objectives of land use planning

The broad purpose of town planning, according to the British Government, is to regulate the use and development of land in the public interest. The objectives are to ensure that land is used sustainably, effectively and efficiently and that development should be encouraged providing it does not harm the environment. The aim is to improve the quality of life.

What these objectives suggest is that planning is a satisfactory mechanism for regulating the environment but the reality is very different. With existing taxes encouraging speculation in land and property, the withholding of land from development and by making land and property more expensive to buy they hinder the satisfactory functioning of planning because, as mentioned above, they:

- discourage urban regeneration;
- encourage urban sprawl with its associated disadvantages;
- increase the cost of housing making it less affordable;
- increase the cost of development thereby acting as a deterrent to further development;
- help add to transport and infrastructure problems, and
- make compulsory purchase and compensation more expensive.

There is, however, a further twist. Whilst the system of taxation can be seen to operate against the interests of planning it might be thought that planning effectively mitigates against these negative effects to create sustainable development. In reality the situation is the opposite. Contrary to popular belief the planning system actually reinforces the negative effects outlined above. There are four ways in which it does this, namely, it (1) helps reinforce speculation in land, (2) it helps increase land values, (3) it has an inflationary effect and (4) it helps to discourage development.

(1) How planning reinforces speculation

Town planning cannot alter the supply of land but it can alter the supply of land for development, which it does with effect. Sites allocated for development in the UK tend to be limited in number because, culturally, considerable emphasis is put on protecting the environment. Many areas are protected in one way or another (examples include green belts, agricultural land, national parks, areas of outstanding natural beauty, and conservation areas) with new development concentrated within or at the edge of towns, cities and villages. Development boundaries tend to be drawn tightly around most built up areas with occasional exceptions for large scale development such as town expansion schemes and the proposed 'eco-towns'. Within urban areas land allocated for development may be no more than 2-3 per cent of the urban area.

In contrast to this the possibilities for development and renewal within urban areas are numerous but frequently unknown in advance so that planning authorities resort to written criteria to guide development. Targeted primarily at use, density, design, access and landscaping, but often in a very generalised way, these criteria aim to cover all eventualities for development and are rarely site specific (McGill, 1999). Thus the outcome for development at individual sites is frequently unclear with the result that uncertainty and speculation over what may be allowed occurs.

In this situation developers naturally seek to build as much as possible and apply to the Local Planning Authority for what some may describe as excessive development. Subsequently, during the process of the application, if the authority's planning officer recommends refusal, the application can be withdrawn. When this happens no decision is made, it does not set a dangerous (as viewed by the applicant) precedent and another application for a reduced scheme can always be submitted at a later date. Alternatively, if

the applicant thinks there is a chance that the application may be approved but is refused there is always a right of appeal to higher authority. Frequently appeals are allowed because the advantages of an approval (e.g. it helps foster the local economy) are seen as outweighing protection of the environment. Overall, the planning system increases the scope for speculation.

(2) Planning helps increase land values

When planning permission is granted at a site it invariably increases its value but this is only part of the increase in land values released by planning. First there are increases relating to the site itself where uncertainty can arise over the amount of development that may be allowed. For example a developer may wish to

demolish an existing dwelling and erect several on the same site in the hope that planning permission is granted. The problem is that it is frequently unclear how many new dwellings may be allowed. Policy is not always specific and local planning authority decisions can vary for a variety of reasons. As such it would be reasonable to conclude that uncertainty over planning decision-making will affect site value (See Box 9.1).

Second, increase the value of one site through the grant of planning permission and in many cases it will increase the value of other sites as well. This is because land values are created by the demands of the community as a whole (and not town planning) and transcend individual site boundaries as a result. Fluctuations occur



BOX 9.1 EXAMPLE A

This four storey block of flats replaced two storey buildings which previously occupied part of the site. Planning policy did not specify any particular density or building height requirements although it did require these matters to be appropriate for the location. Immediately in front of the building is a road leading to a parking area which also serves other apartments with the result that there is an overall increase in density. One interesting point is that developments such as this, whilst they increase the prospect of higher surrounding 'land' values can, at the same time, decrease the amenity value, and hence the monetary value, of adjoining 'buildings'.



BOX 9.2 EXAMPLE B

The two dwellings in this photo are located within large plots where, in theory, there is considerably more scope for redevelopment either together or separately. Both options have occurred elsewhere in the same street where apartment blocks have replaced one or more dwellings. This fact increases speculation within the area which is arguably enhanced by existing landscaping and tree cover which help to protect the amenity value of neighbouring properties. Fewer land owners to negotiate with also helps although the 'nimby' factor ('not in my back yard') can also affect speculation.

for a variety of reasons (Blundell, 1993) but the reality is that land value contours are effectively created. These increases in value, of course, apply to the land element of property value and not the building element. Planning simply releases them and nationwide, over time, this influence can be considerable. (See Box 9.2)

(3) Planning has an inflationary effect

Another aspect of these increases in value is that they are created overnight before any development can take place. They occur before there can be any corresponding increase in construction and related goods and services which makes such increases inflationary. Delay the development for three years (this is currently how long permissions remain valid in the UK) and the inflationary effect not only continues throughout this period but also increases because of the ongoing cumulative effect of other permissions elsewhere. There is also the point that even if the development does not proceed there is still an increase in value and inflation will occur. Extend the argument nationwide and the increases and their corresponding inflationary effects will be considerable.

There is, however, a further aspect to this inflationary effect because, as reported above, these overnight increases in value are not restricted to sites where planning permission has been granted. Neighbouring land where permission has not been granted and where there is no intention of applying for consent can and does also increase in value. This generally applies to surrounding land and can apply to sites where dwellings already exist. In many cases, therefore, planning actually helps to increase the value of many existing dwellings.

One aspect of these increases in value is that they provide collateral for loans which are not backed by tangible wealth but simply by a piece of paper granting planning

permission. Importantly, this ability to secure loans starts immediately after the grant of permission irrespective of when (and where) the development actually commences. It occurs before there can be any corresponding increase in goods, services and construction and accordingly has an inflationary effect. The planning system, therefore, instead of counteracting the effects of the existing tax system, reinforces its negative effects by substantially adding to inflation. It is a fact that is insufficiently appreciated within the planning profession and elsewhere.

(4) Planning further discourages development

In the UK there exists a complex system for applying charges to new development. Originating from the introduction of nationwide public controls over the development of land in 1947, it evolved over the years from development charges via planning gain into what is currently called 'planning obligations'. This requires developers, when seeking consent from the local planning authority, to contribute cash or, occasionally, in-kind gains to the local community. The aim, since 1947, has been to capture part of the unearned increment in value created by the grant of planning permission. The proposed community infrastructure levy in England is the latest variation on this theme.

Originally intended to capture increases in value based on the difference between existing use value and development value, it evolved into regulating the off-site effects of new development (e.g. traffic generation or downstream flooding) and is now used to require money for a variety of benefits. Examples include educational facilities, new roads, extra public transport facilities, public open space and social housing. Government guidance makes this possible but the outcomes are somewhat arbitrary with variations between authorities in the benefits sought and the money requested. These variations

occur depending on which part of the country the proposal is located, the pressures for development, the prosperity of the area, levels of unemployment and so on.

In essence the obligation imposes extra costs on development which, it is argued, can be deducted from the price paid for the land. Many see this as a legitimate claim for capturing part of the increase in land value arising from the grant of planning consent. It is normally a one-off payment at the time of consent or commencement of development but if the development does not proceed neither does the obligation.

Five main flaws can be identified with these attempts to capture land value:

- all have been directed solely at new development and ignore the fact that land values transcend all sites whether developed or not;
- all have targeted development value rather than land value thereby focusing principally but not exclusively on the capital element of value;
- all have been in addition to and alongside the existing tax system and cannot therefore deal with its adverse effects on land and property prices;
- the charges focus on one-off, up-front payments at the time of development thereby taking no account of changing land values over time; and
- the overall effect of the charges is to discourage development.

The conclusion is that this is a most unsatisfactory arrangement for trying to capture land value increments and that, in reality, it perpetuates the damaging effects of the existing tax system with all of its adverse consequences for society.

9.4. EFFECTS OF A TAX SHIFT TOWARDS LAND

Several adverse effects of concentrating taxation on labour and capital and not land have been highlighted above. This raises the question of what effects a tax shift towards land would have and, more specifically, what affect it would have for sustainable development and the provision of new infrastructure.

The initial effect of the shift would be to *reduce the withholding of land* from improvement. If the charge applied to the publicly-created, land element of value and was based on what could reasonably be expected to be granted planning permission, this would create an incentive to put land to better use. This would apply to all urban areas but especially those which are run down and where there are derelict, unused and under-used buildings or sites.

The benefits could reasonably include all of the following:

- increased development of vacant sites;
- the redevelopment of neglected buildings;
- the improvement of many other buildings in their existing use (e.g. older housing);
- the improvement of existing buildings to new uses;
- the creation of many local jobs directly associated with the above;
- the creation of other local jobs and services arising from increased local spending (the multiplier effect);
- increased vitality in the local economy with a more positive effect for local businesses and existing and new activities;
- less need for public money to fund regeneration schemes (the incentives created by the land tax reduce this need); and

- more revenue could be targeted towards other necessary services such as new infrastructure (including transport infrastructure), health care, education, etc.

In this situation town planning could take on a more positive role through land use policy with more specific criteria used to guide new development and new uses of land. These could include greater clarity regarding use, densities, design, height of buildings, amenity and more. This action would be compatible with the increased incentives created by a tax shift to land and facilitate more sustainable urban living.

A second effect would be to *reduce speculation in land*. It would become less attractive to purchase land and property unless the intention is to put it to better use. This would have the effect of reducing demand which would help stabilise prices and lead to more affordable housing. This would be in respect of both existing and new housing.

There would also be *less of an inflationary effect* for several reasons. First there would be an increased supply in the provision of new and improved buildings and uses within established urban areas and a lessening of demand due to the reduction in land speculation. Both would affect the price of land and property. In addition the tax shift would encourage more investment in jobs and tangible wealth creation. This would be alongside a corresponding reduction in other taxes such as income tax or capital gains tax which means there would be further benefits (e.g. increased spending power).

There would be *environmental benefits* because urban regeneration would increase and lead to improved urban environments. The demand for sprawl would fall with a consequential reduction in the loss of agricultural land with less intrusion in the

landscape. Commuting would be reduced because more local jobs would be created and services would be less spread out. This would reduce overall travel distances, atmospheric pollution and road accidents. Finally, depending on the extent of the tax shift, more revenue could also be made available for extra public works such as parks and new transport infrastructure.

In addition, such a tax shift would increase opportunities to *capitalise on energy saving improvements* and encourage greater use of alternative technologies to combat climate change. Both could be incorporated into existing buildings, urban and rural regeneration programmes and new development projects with, as appropriate, additional incentives for local businesses and households to install these changes. This would further help boost existing and new local businesses and help beat the recession.

In respect of the operation of town planning, such action would not hinder the proper planning of an area because planning has to work within the confines of the prevailing tax system. If the latter was focused more on land this would reduce speculation, reduce property values and reduce the withholding of land from more productive use. As such, taxation would be seen as helping rather than hindering the aims and objectives of planning, unlike the present system.

9.5 THE NEED FOR FURTHER ACTION

However, such improvements would not be automatic. To take full advantage of a tax shift towards land various matters will need prior investigation and research. Important ones include the following:

- The establishment of a reliable land record database. For the purposes of introducing land value taxation it will be necessary to install a land registration

- or cadastral base which enables sufficient site information to be collated to enable site values to be assessed. Modern computer technology would help enormously here.
- The assessment of land values. Land or site values are already assessed in some countries using valuation expertise and methodology. For land value purposes this should be assessed on 'highest and best use', that is, it should be based on what is already built on individual sites and/or what new development may reasonably be allowed on individual sites. It would be totally inappropriate to value such sites solely on existing use as this would not create any incentive for improvement. It is where planning policy, other planning criteria, existing uses and extant planning permissions become important (McGill and Plimmer, 2004) in assessing appropriate value.
 - The determination of appropriate rates of land tax. More research would be needed to assess what would be appropriate where information from cities such as Pittsburgh and Harrisburg in the USA, Copenhagen in Denmark and Sydney and Melbourne in Australia could provide useful information. Initially it might be appropriate to introduce land taxes to replace existing property taxes and then increase the rate of land tax at a later date with corresponding reductions in taxes on labour and/or capital. Revenue could also be raised by an additional levy for specific projects such as the new community infrastructure levy although this should not, of course, be restricted to sites where planning permission is granted. It should include all land likely to benefit from the improvement.
 - Increased understanding. This is vitally important as there currently appears to be a distinct lack of appreciation of what would be involved. This can be compounded by factors such as the definition of land in section 336, Town and Country Planning Act 1990 (relating to England and Wales) which includes any building (HMSO, 1990). This hides the crucial difference between land and capital and effectively discourages understanding within the planning profession (and elsewhere) of how land values are actually created. It helps to explain why attention has focused only on development sites when it is all sites that should be considered. This is the fallacy of existing arrangements in the UK which concentrate on trying to capture increases in value solely from new development. This is seen as a mistake and is counter productive.
 - Political will would also be important. With limited knowledge about the advantages of a tax shift it is unlikely that politicians will want to alter the tax system away from labour and capital towards land.

9.6 CONCLUSION

This chapter draws attention to the fact that all human life is totally dependent on the natural resources of the world, commonly referred to as land, and that taxation and land use planning can influence how land is used for the benefit and wellbeing of citizens and societies. The chapter also shows that different systems of taxation can have significantly varying effects on the progress and prosperity of nations by drawing attention to the system of taxation in the UK which focuses on labour and capital, two of the three factors of production, to the virtual exclusion of tax on land, the third factor.

The conclusion is that this has distinct disadvantages for society, with eight highlighted. These are that the current system of taxation encourages speculation in land which increases land and property prices with a number of adverse effects. Important ones are that with increasing amounts of money invested in bricks, mortar and grass this reduces the volume of money available to the rest of the economy with less available for jobs, services, goods and infrastructure. At the same time it encourages the withholding of much urban land and property from improvement, it makes new development more expensive (because of its inflationary effects) and it encourages urban sprawl with further adverse consequences for health, the environment and quality of urban life. Many of these influences interact with each other in a negative way which reinforces the adverse effects.

Alongside this situation there is a system of land use planning which is reportedly designed to ensure that land is used and developed in the public interest and where key objectives are to create 'affordable housing' and 'sustainable development'. The conclusion, however, is that the situation is very different. Rather than deliver cheaper housing and sustainable development, the planning system actually helps to make things worse. This is because it reinforces speculation in land which has the added effect of increasing land and property values within urban areas with a consequential inflationary effect that helps to discourage development.

The conclusion from the above is that the UK and other societies that operate similar systems of taxation would benefit from a tax shift away from labour and capital towards land. If more revenue could be obtained from the surpluses going to land together with reductions in taxation on labour and capital then the theory is that it would have the opposite effect to the disadvantages mentioned above. It would reduce speculation in land, help stabilise property prices, have less of an inflationary effect, encourage development, provide a boost for local economies, reduce the rate of urban sprawl and reduce municipal costs. It would also mean that land would be used more efficiently, more effectively and more equitably with less environmental damage. In short, the conclusion is that such a tax shift would significantly improve the scope for achieving sustainable development.

That is the theory. What is not known is the rate and extent to which improvements would or could be achieved or take effect. It means that careful thought should be given to its introduction where attention should focus on establishing what it would mean for people and businesses and how it could be introduced without detrimental effect. Attention should concentrate on increased understanding and what the potential drawbacks might be. In order to create a more sustainable future these matters should be a major subject for research and investigation.

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10 LAND AND PROPERTY TAX IN POST-APARTHEID SOUTH AFRICA

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Abstract

South Africa's property taxation and land value capture to finance housing, serviced land and infrastructure for our urban poor, are under-developed and insufficiently mainstreamed. This chapter asserts that the limited reach of land management policy, regulatory systems, and unregulated land and property markets contribute to inequality, poverty, marginalisation, and spatial segregation. Municipalities do not optimise land value tax and other land value capture mechanisms to finance for pro-poor development. The Development Action Group (DAG) based its findings on our work over two-years as part of our Value Capture Programme. Results were obtained through primary and secondary methods including a literature review, grassroots participatory action research, interviews with government officials, academics, land and property experts, international case study analyses, records from the deeds office, valuation rolls of selected municipalities, and follow-up engagements with municipalities post DAG's value capture and land management course. DAG found that South Africa has a tax system that acts as a disincentive to the intensive use of land, and encourages land speculation and contributes to urban sprawl, resulting in unsustainable and inefficient cities. The new Property Rates Act (2004) did away with pure site value taxation and composite rating. Considering the benefits of a sitelland value tax, the question beckons what the motivation was for government to eliminate this option from new property tax legislation. DAG presents lessons learned from our local government finance, land and property tax reform experiences, with themes being the need for political will and champions of innovative approaches; active participation of civil society; partnerships between government, private sector, and civil society; changes in policy and practice; and capacity development of politicians, officials and civil society. DAG recommends that future research efforts be aimed at appropriate and contextually relevant land taxation and value capture mechanisms and lessons be learnt from implementation internationally.

Keywords: *land value capture, land management policy, inequality, pro-poor development, Property Rates Act, site value taxation, composite rating, partnerships.*

* This chapter is largely based on work done by Mercy Brown-Luthango for the Development Action Group and Urban Landmark

10.1 INTRODUCTION

Land, and who benefits from increases in land value, is an emotive issue at the centre of much debate in South Africa around the fair distribution of resources, and growth of homelessness, poverty and inequality in one of the world's most unequal societies. It has a fundamental impact on urban planning, design and sustainable human settlements. Government's hesitation to intervene in the land and property market deepens the challenge of the availability of affordable, well-located, serviced land. This poses a major obstacle to the provision of adequate housing for the urban poor, causing informal settlements, backyard rental and other forms of inadequate housing situations to develop (Brown-Luthango, 2006).

This chapter focuses on property tax, which government can use to capture value from their investments to finance provision of infrastructure and services. DAG argues that the poor are not given space or opportunity to participate in urban land and property markets, which cannot be relied upon to cater for their needs. The chapter argues for bold, decisive and strategic interventions in these markets to ensure that vulnerable citizens reap some of the benefits of government's investments.

The purpose of this chapter is based on a recognition of the need to develop capacity and mainstream land value tax and other value capture mechanisms as a research priority, resulting in greater prominence of these mechanisms in the urban development discourse. DAG recognises the importance of senior officials and political leaders championing the land value tax agenda, as changes to fiscal instruments (such as taxation, financial incentives, etc.) involve protracted political, legal and bureaucratic processes that require a long-term commitment. Results were obtained through primary and secondary methods, but not limited to, a

literature review, grassroots participatory action research, interviews with government officials, academics, land and property experts, international case study analyses, records from the deeds office, valuation rolls of selected municipalities, and follow-up engagements with municipalities after DAG's value capture and land management course.

The ideas expressed on value capture and financing pro-poor infrastructure development recognise the extent to which the value capture discourse, and therefore the extent to which it is embedded in theory and practice in South Africa, is still nascent.

The chapter is divided into seven sections. Section 10.1 introduces the issue of land, who benefits from increases in land value, high levels of inequality in South Africa, and government's hesitation to intervene in the land and property markets. Background and context to the current situation is presented in Section 10.2, providing insight into 'the apartheid city', the country's political, economic, land and housing contexts. A conceptual framework to the Development Action Group's approach is presented in Section 10.3, with reference to specific 'lenses' such as the 'poor's right to the city' and 're-imagining the city'. Section 10.4 sheds light on the challenges including growing inequality, limited reach of existing policy and urban regulatory systems, and factors accounting for highland prices. Section 10.4 provides concise feedback on challenges provided by local municipalities. Section 10.5 addresses challenges through the consideration of capturing unearned values. Property tax reform in South Africa, in particular, land value tax, is unpacked in Section 10.6. Finally, Section 10.7 puts forward lessons and core messages for South Africa, and a preliminary assessment of local municipality experiences. In conclusion, a snapshot of the salient features of the chapter is provided, highlighting some of the challenges and recommendations presented in the chapter.

10.2 BACKGROUND AND CONTEXT

10.2.1 'The Apartheid City'

Under Apartheid, urban planning and management shaped the urban landscape in very specific ways. The 'Apartheid City was a political economy of space which was based on two policies, i.e. racially-based spatial planning and development for some at the expense of others' (South African Cities Network, 2004). Apartheid urban planning reserved specific spaces for the residential location of specific races and classes. Residential location ultimately determined the level of access to resources, infrastructure, other services and economic opportunity. This bears testimony to the unequal and exclusionary nature of Apartheid urban planning and management (Brown-Luthango, 2006).

With the abolition of Apartheid in 1994, government committed to redressing imbalances and inequality, and creating cities that are equal, inclusionary, well-governed, productive and sustainable. A number of laws and policies aimed at guaranteeing citizens' access to a host of socio-economic rights were introduced - the right to adequate housing being one of the most significant. However, in a context of extreme poverty and growing inequality, the need for infrastructure and basic services, and difficulty to access well-located land for housing, still pose major challenges for all spheres of South African government that are not optimally using fiscal and regulatory mechanisms for the common good (Brown-Luthango, 2006).

10.2.2 South Africa's political and economic context

The South African economy finds itself in a downturn after more than a decade of remarkable economic growth - an unusually long growth cycle for a developing nation. South Africa's gross domestic product (GDP)

has grown spectacularly since 1999 - on average 4.5 per cent per annum (Presidency, 2007). Despite the recent recession, the country stands tall amidst other struggling nations. Although this insulation from the full effects of the global financial crisis is attributable to the post-Apartheid fiscal discipline exercised by the African National Congress (ANC) government, the outcome of the post-Apartheid macro-economic approach is not positive in its entirety (Houston, 2009).

After 1994, government continued with neo-liberal macro-economic policies through the adoption of the Growth Employment and Redistribution (GEAR) economic policy in 1996. Under this policy, the private sector would play a significant role in service delivery, especially the delivery of municipal services such as the provision and supply of water, refuse collection, meter reading, street cleaning, housing provision and others. This policy promoted 'cost recovery', a principle that households should pay for services in relation to their level of consumption, irrespective of household income, which frames the delivery of social services such as housing, water and electricity to poor communities. The Presidency's Ten Year Review (Presidency, 2003) acknowledged that while GEAR successfully achieved economic growth (using GDP as a measure of growth) - it failed to provide employment, reduce the numbers of people living in poverty, and created expanding inequality.

10.2.3 The land and housing context

Despite significant strides in addressing major development challenges, huge backlogs remain. The number of poor people in South Africa living on less than US\$1 dollar¹ a day has risen from 9.4 per cent of the national population in 1995 to 10.5 per cent in 2002. We are currently facing a national housing backlog of 2.4 million housing units. More than 27 per

¹ One dollar is the international poverty line.

cent of the urban population lives in informal structures. Between 1996 and 2001 there was a net increase of 735,627 informal dwellings, excluding backyards, and the absolute number of households without formal shelter increased by 264,649 during the same period (South African Cities Network, 2004).

The question of land has always been contentious, due to a history of violent land dispossession resulting in the most unequal land distribution patterns in the world. According to the South African Human Rights Commission, there are six million landless people in South Africa (DFID, 2005). Between 2001 and 2003, only 2.3 per cent of agricultural land in South Africa had been redistributed through its redistribution programme (Lahiff and Rugege, 2002). The current pace of land redistribution will need to increase five times in order for government to reach the target.² Securing adequate finance has been identified as one of the factors impeding the success of the land redistribution programme (Van den Brink, 2004).

At an average cost of \$131,579 per hectare (in some cases \$197,368), the City of Cape Town will need between \$900 million and \$1.3 billion to acquire land for housing. The additional servicing cost is around \$4.8 billion before the City can provide other services like housing, schools, clinics, and others. Currently the City is considering extending the budget from \$2.34 million in 2006 and \$13 million in 2008 to \$26 million for the period 2009-2010 in order to acquire land.³ Well-located land has become increasingly high in demand and therefore more expensive, forcing the State to only acquire land in undesirable peripheral areas where land is cheaper. Therefore, the obvious alternatives for the poor is a government-subsidised 42 square meter house on marginal land or an informal

dwelling with no access to basic services in an informal settlement or backyard (Houston, 2009).

Public transport costs in Cape Town increased substantially between 1998 and 2002. Subsidies for rail and bus transport in Cape Town increased from \$54 million in 1998/1999 to \$56 million in 2001/2002. During the same period, money spent on housing in Cape Town was \$27 million in 2001/2002 and \$30 million in 2002/2003. Therefore, the amount spent on the transport subsidy was more than double that of the housing subsidy.⁴ The illogical increase in subsidising public transport to facilitate further peripheralisation of the poor is a reflection of the divergence between policy and practice.

Given the fact that government's approach has resulted in limited benefit to the poor despite its Constitutional obligation, there is room to explore other strategies through existing value capture mechanisms, and through exploring and piloting innovative value capture instruments / mechanisms. Examples include a focus on the use of public land for the poor and on tenure other than freehold; increasing municipal revenue through leasing of public land as opposed to the sale to private developers; and capturing unearned value derived from increased property values through public infrastructure investment (Brown-Luthango, 2006).

10.3 CONCEPTUAL FRAMEWORK

Land is a commodity that is accessed through formal market processes of demand and supply, and is subject to market inefficiencies. In South Africa, land is treated as a regular individual asset by government, who fails to seize opportunities to capture unearned increment resulting from the rise in land values through public investment.

² www.sahistory.org.za/pages/specialprojects/land/06_liberation.htm

³ Personal communication with a City of Cape Town official, 10 August 2008

⁴ Western Cape Department of Local Government and Housing, 2006

However,

“(L)and, because of its unique nature and the crucial role it plays in human settlements, cannot be treated as an ordinary asset controlled by individuals and subject to the pressures and inefficiencies of the market. The unearned increment resulting from the rise in land values must be subject to appropriate recapture by public bodies unless the situation calls for other additional measures such as new patterns of ownership or the general acquisition of land by public bodies.”⁵

This notion of land as a collective asset lies at the heart of the value capture concept. Effective land management should ensure that the value of land, a finite natural resource, benefits all members of society, particularly when public investment (such as the provision of infrastructure) increases property values. Effective urban reform and eradication of socio-spatial inequalities require government to implement policies that promote the ‘social function of land’ over the private consumption of land and land value (Furtado and Jorgensen, 2006).

Historically, DAG supported communities to organize themselves in their struggle to access land, prevent evictions, acquire basic services, and contributed extensively to the construction of houses. Citizenship and participation of civil society at different levels on a city-wide scale is therefore at the core of DAG’s work, especially in the context of unpredictable and fluid political dynamics and continued inefficient use of land for urban development based on past practices. There has been a recognition that a focus on housing only is inadequate to transform the way South African cities operate equitably for all citizens.

⁵ Preamble to the Recommendations of the United Nations (HABITAT) Conference for National Action on Human Settlements, Vancouver, Canada, 1976.

DAG’s conceptualisation of an approach towards equal access to land and resources is rooted in two core tenets, namely ‘the poor’s right to the city’ and a ‘re-imagining of the city’ by the users of the city. The notions of ‘the poor’s right to the city and a ‘re-imagining of the city’ are premised on citizens’ capacity to assert rights in articulating their resource needs, realise their socio-economic rights, and participate in democratic decision-making processes. Poor citizens should be equipped with proper tools and knowledge to effectively claim and defend their rights through their active participation in the development and implementation of pro-poor public policy that manifests in a city that works for all citizens. Cooperation with and support to government is equally significant, specifically regarding understanding institutional and regulatory challenges and constraints, but also regarding government’s willingness to explore alternative (if not drastic) approaches to urban land management (Lefebvre, 1996).

Governance regimes must manage the interrelationship between State, market and civil society. Continual interaction between these actors is required to achieve a developmental approach that negotiates the interests and capabilities of all actors in the development arena (Development Action Group, 2006). The extent to which civil society actors have been unable to organize, act in concert, and develop clear shared policy positions, has shaped engagement with the State and this space for public participation is therefore not well-utilised. Addressing this weakness in civil society will be critical to fostering co-operative governance, driving a new urban development agenda for a re-imagined city.

The South African Constitution and Bill of Rights are the most important legislation providing for and protecting the right of each South African to access ‘adequate’ housing.

Section 26 of the Constitution states that:⁶

- Everyone has the right to adequate housing.
- The state must take reasonable legislative and other measures, within its available resources, to achieve progressive realisation of this right.
- No one may be evicted from their home, or have their home demolished, without an order of the court, made after considering all the relevant circumstances.

However, rights on paper do not necessarily translate into a substantial improvement of living conditions of all. Rather than addressing imbalances, post-Apartheid policies have tended to compound social and human challenges inherited from the past. According to the State of the Cities report (South African Cities Network, 2006), our cities today are more unequal than they were ten years ago.

10.4 THE CHALLENGES

10.4.1 Growing inequality

Growing inequality is most evident and prevalent in the country's urban centers. Global and national trends indicate that as more people are drawn to cities in search of a better life and economic opportunities, the urbanisation of poverty and burgeoning informality will continue.

Within the context of a capitalist system which produces high levels of unemployment and fragile livelihoods, the issue of cost-recovery and the privatisation of social services have had devastating effects on the capacity of poor communities to access adequate housing.⁷

⁶ Republic of South Africa 1996 Section 26 (1), (2) and (3).

⁷ Adequate housing is defined as more than shelter; it includes security of tenure; freedom from discrimination in housing; availability of services, amenities and infrastructure; habitability of the dwelling; accessibility of the location; and the affordability and cultural adequacy of both dwelling and location. Adapted from Tonkin, A (2008) *Sustainable medium-density housing: A resource book*. Development Action Group, Cape Town.

Greenberg (2004) sites a number of cases across the country where the poor have been forcefully removed or evicted from well-located areas or land which was zoned for commercial purposes. These evictions and forced removals of poor residents from prime land continue unabated, often in the name of development, urban renewal and even slum upgrading.

In the report on his mission to South Africa in 2007, Miloon Kothari (2007), United Nations Special Rapporteur on Adequate Housing states that:

“it appears that many evictions are executed in the interest of gentrifying inner urban areas and promoting regrowth and development and particularly in inner city Johannesburg it seems that the drive to attract private investment has been at the expense of the urban poor who have been living in dilapidated buildings in the inner city close to services and livelihood opportunities for many years.”

The pervasiveness of the market-driven development paradigm thus results in the entrenchment of the historical spatial and socio-economic inequalities and the further exclusion and marginalisation of the urban poor. Kothari (2007) further states that the *‘revitalisation of urban areas must take place in a way that genuinely promotes a socially and economically inclusive society. The redevelopment of urban areas must not be left only to market forces, as that could result in the exclusion of poor people from access to housing and livelihoods including essential public services.’* This delivery approach has forced poor communities to find alternative ways to access shelter and land, and coupled with the nature of the State's engagement with poor communities, has influenced the political climate in the country (Houston, 2009).

The question therefore beckons: if accessing land is the problem, why does government not access more land, and why not release more public land holdings for pro-poor development?

10.4.2 Limited reach of existing policy and urban regulatory systems

Charlton (2006) states that 'the largely unchanged apartheid era laws on urban land clearly and definitely favour the rich and influential segment of the population, that is what they were set up to do and that is what they still do.' Berrisford & Kihato (2006) argues that the ideology behind the formal regulatory system has retained positive attributes such as relatively well-organized deeds and cadastral systems, but is under increasing pressure due to higher volumes. Although it has positively transformed in many areas, such as tenure security and prevention of evictions, there are still unchanged, old, outdated regulations on development and use of urban land and taxation.

South Africa's urban policy and regulatory context is complex, with a wide range of sometimes contradictory national and provincial policies and strategies, and the separation of responsibilities between various spheres of government frequently unclear. The policy environment requires high levels of inter-governmental co-operation in both planning and implementation of urban development projects that has thus far represented a challenge to all spheres of government. In addition, there is a remarkable lack of understanding of urban development issues amongst public representatives and officials in the major metropolitan areas and an absence of shared long-term visions of the development of urban centers. South Africa's new settlement policy, entitled the 'Breaking New Ground Plan', focuses on the creation of sustainable human settlements

and introduces the upgrading of informal settlements, amongst others. However, while policy intentions shifted toward a sustainable human settlements approach, housing delivery continued to marginalise poorer households, now often done in the name of settlement upgrading.

10.4.3 A booming property and land market

Between 2000 and 2005, house prices increased by an average of 20 per cent per year. In 2004 alone, house prices increased by 32.2 per cent, although it slowed down somewhat in 2005, a still significant growth of 22.9 per cent was recorded. Growth of 15.3 per cent was experienced during the first six months of 2006 (ABSA, 2006). The increase in housing prices has put home ownership out of reach of a great proportion of the population. Between 2000 and 2004, the price of the average South African house (80m² – 400m²) increased from \$31,579 to \$64,271 (Philp, 2004). Prices of houses at the top end of the market (>\$342,105 to \$1,2 million) doubled and in some cases trebled between 1999 and 2005.

Notwithstanding, houses in the 'affordable' (<\$29,736) segment of the market has not shown the same level of growth. One factor accounting for this is a lack of 'trading' in this and lower sectors of the market. This is due to households in these segments often being unable to afford to move into a higher bracket of the housing market and hold on to their properties. This, according to the Western Cape Sustainable Human Settlement Strategy, means that 'households are unable to realise the 'full' asset value of their housing, which undermines housing as a potential investment for low income households at a time when it is realising astonishing growth for high income households'.⁸

⁸ Western Cape Department of Local Government and Housing, 2006.

Land prices also increased substantially over the last few years. Nominal residential land prices increased by 17.3 per cent to approximately \$36,868 average during the second quarter of 2006, compared to 22.9 per cent in the first quarter (ABSA, 2006). Scarcity of suitable land for residential development means that this growth in the price of land is unlikely to slow down in the near future.

10.4.4 Factors accounting for high land prices

A study conducted by Rode and Associates (2008) found that between July 2001 and January 2004 the price of serviced land in the Campsbay/Bakoven area in the Western Cape Province grew by 70 per cent. Moreover, this trend applies in the wider metropolis. The growth in land prices is supported by a report on the ownership of land by foreigners in South Africa commissioned by the Department of Land Affairs that argued that over a six year period (1998-2004), the price of land increased 'substantially more' than the price of buildings on the land. ABSA confirmed this trend in its quarterly residential perspective stating that 'since 2000, suitably vacant and fully-serviced land for residential development has become increasingly scarce in South Africa on the back of a range of demographic, economic, socio-economic and new housing construction factors' (ABSA, 2007:1). Demand for housing outstripped supply.

Urbanisation, driven largely by migration to the bigger metropolitan areas, is one of the factors that had an impact on the demand for housing, translating into a greater demand for land. According to the State of the Cities Report (2006: 6-3) in 2001, according to census data, urbanisation in South Africa stood at 56.3 per cent and over the last five years South Africa's urban population has increased at a faster rate than the national population. Other factors accounting for the growth in the

demand for housing and land include greater economic growth (Presidency, 2007), higher levels of formal sector employment,⁹ lower inflation and substantial personal tax relief (ABSA, 2006).

Another factor accounting for the increase in the price of serviced land highlighted by both Rode and Associates and ABSA is the ability of local government to supply services at a fast enough pace to keep up with the demand for serviced land. Many municipalities face a twin challenge of providing services such as water, sewage, electricity and road infrastructure to newly formed areas and at the same time are struggling to replace outdated, deteriorating infrastructure. A lack of capacity at local level, financial constraints and a need for own revenue sources, are also contributing to the ability of municipalities to provide the necessary services thereby driving up the price of serviced land. In the absence of affordable, serviced land and slow delivery of housing many urban dwellers are forced to resort to informality. This phenomenon is not restricted to South Africa, but is commonly experienced in many parts of the developing world including cities in Latin America, Asia and other parts of Africa. Smolka (2003), referring specifically to the Latin American context, argues that the excessively high price of serviced land is one of several explanations for the extent and persistence of informal markets.

Land speculation accounts for the significant increase in land prices and has become an accepted, even desirable 'investment' activity. Speculation in land distorts the land market, drives up the price of land and deprives those most in need of land, infrastructure and services from accessing these resources by retaining land and withholding it from the market. The investment potential of land has

⁹ Formal sector employment grew by 1.4 million jobs between 2000 and 2006 of which 71.4% of workers employed were in the formal sector in the major metropolitan areas .

reached critical peaks, especially highly sought after coastal land on the West Coast. In these areas, buyers of 'raw' land have realised profits of up to 1000% after holding on to it for six to eighteen months (Brown-Luthango, 2006). This is well captured by Furtado and Jorgensen (2006) when they argue that:

“the antisocial nature of vacant urban land can be seen basically from two angles. The first is retention of such land while the areas around them are being equipped with public infrastructure, leading eventually to private appropriation (by the owners) of the value increments. The other is the social perverseness of retaining unused land within a context of scarce public resources that could be used to provide urban infrastructure for all the land concerned.”

The land market in South Africa is distorted, and by itself will not distribute land from those who hoard it to those who need it. As so succinctly put by Kotaka and Callies (2002:1) 'the free market does not always – some would say often – result in a logical and equitable distribution of land uses and attendant public facilities necessary to serve the use of land'.

Urgent State intervention is required to regulate this market to ensure that land is used and distributed in efficient, sustainable and equitable ways. State intervention in the market is not the 'irrational' practice that free-market proponents would like us to believe, but it is the prerogative of a national government to 'regulate the use of private land for the health, safety and welfare of all its citizens and to help provide roads, water, sanitation, schools, parks and airports' (Kotaka and Callies, 2002:1).

10.4.5 Feedback from municipalities

A summary of a recent survey conducted of municipal officials who participated in DAG's 2008 Value Capture and Land-use Management Course, yielded the following important conclusions, drawing attention to the above challenges:

- The municipal rating system currently used by local government is problematic. It discourages greater intense use of land, and is punitive in terms of taxing building improvements.
- There is limited scope for local government to use the property rating system innovatively. An example is the legal and financial restrictions (such as the Municipal Finance Management Act) about the responsibility and limitations of local municipalities to implement financial instruments, as these are considered the domain of the National Treasury.
- Limited expertise in value capture and related fields exists in municipalities. There are significant gaps between the actions and decisions of officials in the built environment departments and applications by their bureaucratic counterparts in Finance and Property Valuation departments. There is a conspicuous absence of synergistic efforts and a shared developmental agenda.
- Currently, there is a gap related to training, capacity development and expertise in value capture and related fields. Contextualisation of value capture and land management instruments, grounded in an understanding of opportunities and limitations, are critical.

- Information on value capture and land management mechanisms is not readily available. Seldom does one official have a comprehensive overview or understanding of issues related to value capture, as different officials hold different parts of the picture. Due to lack of inter-departmental and inter-governmental cooperation, officials are not easily available to each other, resulting in limited shared information and knowledge.
- Uncertainty exists about political buy-in -politicians have low levels of awareness regarding alternative and innovative approaches to land value capture and land management. A dire need exists to provide expert training in municipal finances to politicians as well as to officials.
- Land and property are seen as safe investments during economically precarious times, resulting in a profusion of speculative practices. However, no policies or instruments are currently available to discourage speculation.
- Civil society organizations have not yet grappled sufficiently with municipal finances and its complexities, as they are reputed to operate in the 'social sciences' domain'. However, civil society organizations have an important role to play, that calls for training and capacity development of planners and facilitators.

10.5 TOWARDS ADDRESSING THE CHALLENGES¹⁰

10.5.1 Capturing unearned values

The scale of challenges calls for bold, decisive initiatives and strategic interventions in the market. Interventions should be aimed at redistributing the value derived from a soaring property and land market more equally, and simultaneously strive to protect and secure the right of the poor in the city.

Value capture refers to a process by which all or a portion of increments in land value attributed to public and 'community' interventions are recouped by the public sector. This increased value can arise from three sources: changes in land use regulations, installation of infrastructure, and growth of the population and income of the whole society which would create a demand for land thereby increasing the price of land (Doebele, 2001).

Mechanisms to capture value include conversion of additional value into public revenues e.g. taxes, fees or through infrastructure developments to benefit the poor. The creative and innovative utilisation of value capture mechanisms can provide additional resources that can assist the State in meeting its constitutional obligation in terms of the progressive realisation of the socio-economic rights of all its citizens.

Commentators on the value capture issue agree that all value capture mechanisms have definite risks, but also great potential to realise greater revenue for local authorities and to manage and direct urban land development. It is important that advantages and disadvantages of value capture mechanisms be explored very carefully, and adjusted to fit the specific local context.

¹⁰ Based on Brown-Luthango, 2006.

This is echoed by Smolka and Amborski (2000:19) when they argue that ‘in designing value capture tools to meet some specific objectives or motivations, policy planners must use care in designing the tools to fit the context and conditions’. Governments need to undertake a systematic and rigorous analysis of the costs and benefits of implementing a specific value capture mechanism.

Furtado (2000:2) in her analysis of value capture argues that three non-autonomous public actions or decisions must be associated with the distributive principle of value capture:

1. an original public action which results in land value increments;
2. a second action to capture some of this value;
3. a third action related to the destination or use of collected resources.

A redistribution element should be an essential part of any value capture initiative. Furtado (2000:3) argues that if value captured in a well-resourced, wealthy area remains in that area and is used for the delivery of infrastructure and services in that particular area, then the public action becomes ‘regressive’ as it does not alter the distribution of wealth. The issue concerning the origin and destination of captured value is of primary importance in any value capture initiative. Value capture instruments and policies should thus be linked to urban policies which are aimed at eradicating socio-spatial inequalities (Furtado, 2000).

The development of mechanisms for value capture and shared growth from benefits of surplus values accruing from the ‘boom conditions’ in the upper end of the land and property market can generate the necessary additional resources for infrastructure investment. This investment promotes densification, integration and the generation of resources for low income residential

development on well-located land. An innovative cocktail of interventions should be used, in concert, to address spatial, social and economic imbalances.

The next part of this chapter considers property tax in South Africa, as this is the most important source of revenue for local governments. There has been a renewed focus on the property tax in the context of debates around greater decentralisation and increased responsibility for local government in the developing world.

10.6 PROPERTY TAX REFORM IN SOUTH AFRICA

10.6.1 Local government reform and property tax post-1994

The structure and operation of the municipal system in South Africa was influenced by the country’s history of racial segregation, inequality and exclusion. With the transition to democracy, one of the first tasks of the new government was to transform the municipal context, as local government would play a pivotal role in the delivery of services in post-Apartheid South Africa.

The property tax, as the most important and biggest source of revenue for municipalities, was crucial in this respect as it would greatly impact the quality and extent of service provision. The reform process thus had two components. Firstly, the amalgamation of the different municipal authorities, and secondly, the creation of a uniform property tax system. The reform process was kick-started in 1993 with the passing of the Local Government Transition Act (LGTA) of 1993. The LGTA according to Bell and Bowman (2002:6) ‘sketched out a process for local communities to follow when designing and implementing changes in the structure, function and financing of their local governments’. The reform process was executed in a ‘bottom-

up' manner and involved the establishment of local forums consisting of community-based organizations, non-governmental organizations, business associations and civic associations, who all gave input into how their local government should be transformed. This process resulted in the amalgamation of the formerly racially segregated local authorities into non-racial transitional councils during 1994-1995.

Legislation was passed in 1998 that brought about further reforms to local government. The White Paper on Local Government was passed in March 1998 and gave birth to the Local Government Demarcation Act and the Local Government: Municipal Structures Act. These Acts resulted in further consolidation of local authorities in which the previous 843 transitional municipalities were reduced to 284 newly demarcated municipalities after the local elections in 2000 (Franzen, 2007). Reform of the local government structure was accompanied by a parallel process of reform of the municipal finance system, particularly the property tax.

10.6.2 Land Value Tax or not for South Africa?

The property tax, which refers to a tax called the 'rates on property' has been in effect in South Africa since 1836 (McCluskey and Franszen, 2004). Pre-1994, the property tax was largely an urban-based tax and agricultural land, tribal land and former Bantustans¹¹ were excluded from the property tax base. The previous property tax system allowed for some diversity in the methods used in different municipalities (areas) to collect the tax. Municipalities were given a choice of three systems, in some cases the tax was levied on the site-value of land; some areas preferred the flat rate, while others preferred the composite rating system.

¹¹ Under Apartheid laws certain areas, 'homelands' were reserved for black South Africans and they were only allowed to settle and own land in these areas, referred to as 'bantustans'.

The eighteenth draft of the Local Government: Property Rates Bill was published in March 2003, and made provision for the establishment of a single system for property taxation on a national basis with the aim of creating a more uniform property tax system (McCluskey and Franszen, 2004). The system which was to be implemented is a rate levied on the 'improved value of property'. The Bill was enacted in May 2004 and makes provision for the levying of a rate on the market value of the immovable improvements on a property. Market value is defined in the act as 'the amount the property would have realised if sold on the date of the valuation in the open market by a willing seller to a willing buyer'.¹² The new Property Rates Act (2004) has thus effectively done away with pure site value taxation and composite rating. This change has elicited mixed reactions from different sectors. Some commentators feel that the scrapping of site value taxation was shortsighted as the advantages of site value rating are well documented. Solomon (2007) point out some of the advantages of a land value tax, as it:¹³

- is adequate, fair, neutral, and economical,
- intensifies land use,
- returns the value of government investment in local amenities to the government,
- discourages vacant possession for speculative purposes,
- discourages urban sprawl by bringing unused land into the market,
- encourages access by bringing the price of land to more affordable levels, and
- dampens price escalation, but activates market.

¹² Local Government: Municipal Property Rates Act, 2004.

¹³ Land value taxation refers to the tax on agricultural land, whereas site value tax refers to the tax on urban land.

Several studies have shown that previously when municipalities had a choice between three tax systems, most opted for a system which taxes the land portion at a higher rate than the buildings or improvements. A study by Dunkley (2000) found that during the period 1951 to 1984, most municipalities in South Africa opted for the tax on the site value. During this period, the number of towns that raised revenue from site value increased from 36 to 98 while the number of towns on flat-rating declined from 187 to 61. Even more astonishing is the fact that in terms of growth in the value of improvements, the cities on site-value rating experienced aggregate growth of 413 per cent, those on the composite rating showed growth of 282 per cent and those on the flat rate showed the lowest growth rate of 189 per cent.¹⁴ In fact, of all the major cities in South Africa, only Cape Town and Port Elizabeth still preferred the flat rate. Their percentage growth on improvements interestingly enough, was low compared to the average for the whole of South Africa and particularly those cities on site-value rating (Dunkley, 2000). Bell and Bowman¹⁵ found a similar preference for a system which taxes the land more heavily than improvements. Of the 840 municipalities in existence during the time of the study, two thirds were either using site value rating or composite rating.¹⁶

In 2004, McCluskey and Franzsen found that all seven¹⁷ municipalities which participated in their research were on either site value rating or composite rating and had been on the particular system for 15 years and more, in some cases as long as 50 and 80 years. The majority of those interviewed felt that

the tax basis should also include the value of improvements (which could represent a significant percentage of the value of a property) as it would broaden the tax base and improve revenue. However, 72 per cent indicated that a site or land value tax encourages development and some felt that a site value tax was easier to administer (McCluskey and Franzsen, 2004:39). They argue that a site or land value tax is more progressive than a flat rate tax, because it improves 'vertical equity' as land owners are concentrated in the upper income segment of the population. A system that taxes improvements / buildings dampens development, which diminishes the available housing stock, thereby driving up rents (McCluskey and Franzsen, 2006: 41).

Considering the benefits of a site/land value tax, one has to wonder what the motivation was for the South African government to eliminate this option from new property tax legislation. According to McCluskey and Franzsen (2006), socio-political considerations were the main determinant of post-Apartheid property tax reforms. The possibility of a national land value tax on agricultural land has been raised again in recent times.

10.6.3 An agricultural land tax for South Africa

Van den Brink (2004) argued in 2004 that a national land value tax could be a politically attractive source of revenue for the country, and that a national land value tax could lower the difference between the asset and agricultural value of land thereby facilitating small scale black farmers' access to agricultural land. This call was reiterated in March of 2006 when Thomas and Van den Brink argued that a land value tax should form part of a broader land reform policy, and that a land value tax is politically and economically attractive because it would:

- bring more unused land into the market, thereby combating urban sprawl,

¹⁴ Dunkley, 2000:3. Dunkley's study covered the 48 largest cities in South Africa, each with a total value of R200 million in 1984. Growth here refers to the increase in capital investment as a percentage over the ten year period, excluding the land values.

¹⁵ Bell and Bowman, 1998 in Department of Land Affairs, 2006.

¹⁶ Bell and Bowman, 1998 in Department of Land Affairs and World Bank, 2006:24.

¹⁷ The sample size is small and one can therefore not generalise from these findings, but they do provide some insight into the views of professional valuers, a very important component of the property tax system.

- control land price inflation,
- reduce speculation by absentee landlords, and
- be a great source of revenue for land reform and local government.

A proposal for the introduction of a land value tax on agricultural land was one of the recommendations made at the 2005 Land Summit. The Department of Land Affairs in partnership with the World Bank has entered into a process to investigate the feasibility of a land value tax on agricultural land for South Africa. A report released by Land Affairs and the World Bank in 2006, found that despite the introduction of the new Property Rates Act in 2004, which extends the property tax to agricultural land, municipalities were either not taxing agricultural land or in cases where they were, the tax was based on an outdated 1939 Law.¹⁸ This law favours owners of large tracts of land and disadvantages smaller farms because the rate charged for small farms is 100 times higher per hectare than for larger farmers, which effectively means that the more land you own, the less tax you pay. This encourages land consolidations and land speculation, because ‘it makes the cost of holding on to unused or underused land very low and raises the attractiveness of agricultural land as an asset’.¹⁹ This law is biased against emerging black farmers in areas where it is currently applied - municipalities do not inform land reform beneficiaries that they are exempted from paying property taxes for a period of ten years in terms of the new Property Rates Act, 2004.²⁰ A tax on agricultural land would address many of the challenges above and would also yield significant revenue for municipalities. It is estimated that a tax rate of half a per cent on half of the land would yield more than the Property Tax and the RSC²¹ levy together (Solomon, 2007).

¹⁸ Department of Land Affairs and World Bank, 2006.

¹⁹ *Ibid*, pg. 25

²⁰ *Ibid*.

²¹ RSC levies are local government taxes on payrolls and turnover. These have however been scrapped.

The demonstrated benefits of a land value tax are that:

- it encourages the development of both rural and urban land,
- broadens the revenue base for local government,
- provides opportunities for streamlining a country’s land tenure and cadastral record system, and
- streamlines the fiscal structure and provision of public services.

The following section summarises lessons learned from South Africa’s local government finance, land and property tax reform experience.

10.7 LESSONS FOR SOUTH AFRICA

10.7.1 Core messages

While South Africa has a broad urban development policy agenda in place for promoting spatial restructuring and inclusive cities, it is insufficient to influence the behavior of land and property markets to work for the poor and to change the current form of urban development practice which is structured around the spatial imperfections of these markets.

Political will and champions

A strong government created the Apartheid city over a protracted period. An equally strong and ‘developmental’ State is needed to restructure and transform urban landscapes. This will require political will to pursue such transformation and to generate buy-in, leverage resources, institute the necessary planning and development regulatory frameworks and develop the instruments needed to change current development practice in order to transform the urban context and ensure that markets include the poor. Political will is critical in the face of resistance/opposition from vested interests such as big landowners and developers. Uncaptured value represents

a tremendous loss of potential revenue for municipalities. It cannot be left up to the market to address the current development and spatial challenges as the current operation of the market reproduces and reinforces marginality, exclusion and poverty.

Participation and partnership

Public participation and effective civil society mobilisation are necessary to put value capture on the policy agenda, to balance opposition from vested interests and to ensure that value capture instruments are applied in a way which benefits the whole community. Participation of the poor is important, specifically relating to fiscal and regulatory processes of how land is managed and used, and because of the competing needs of the markets and the poor. Currently, there is an absence of meaningful engagement of the poor, where the State plays the role of facilitator. The developmental State needs to regulate, and have a say in markets that do not work for the poor. In order to effect intervention in markets, citizens need to develop an urban engagement agenda.

To this effect, the 'the poor's right to city' and 're-imagining the city' concepts provide the broader context of a city that is more equitable, and the fact that poor citizens have a right to housing and land, as well as to the way cities are managed.

Government will need to make provision for possible negative reactions from other stakeholders such as private residents and private developers. Public participation in planning and decision-making around value capture mechanisms should be encouraged. Taxpayer education programmes to ensure that taxpayers have a good understanding of the rationale and procedures for the property tax should be accompanied by an improvement in the quality of infrastructure and services provided to the community in order to manage possible resistance from taxpayers (Kelly, 2000:12).

Policy and practice

Value capture initiatives should not only aim to secure additional financial resources, but should be targeted at using planning and development instruments in a strategic way to transform urban landscapes and facilitate the poor's access to resources and economic opportunities.

Unintended consequences of value capture mechanisms have to be considered carefully, as the introduction of a land value tax could for example put an unnecessary burden on small-scale, subsistence farmers or emerging black farmers. Clear protective measures such as progressive rates, tax rebates and tax exemptions need to be considered for vulnerable groups. In the case of farmers, the annual farm income could for example be used as a basis to determine the tax rate. This will ensure a fairer and more equitable assessment of tax liability.

Buy-in from private developers could be secured through the provision of specific incentives to developers for example rebates on development levies, density bonuses, flexible zoning standards, speedier approval of development plans, and so on.

Time, resources and patience are needed to pilot and continuously refine and match the appropriate value capture instruments to a specific set of conditions.

Any value capture programme must be preceded with careful analysis of the land market, opportunities for value capture and the destination of captured value. Furtado and Jorgensen (2006) suggest that one of the most important tasks of an effective land value management strategy is to identify available resources, measure them and direct them towards more effective targets.

A value capture programme needs to be linked to a broader urban reform agenda and a clear vision and plan for the development and management of the city as a whole.

Planning processes, housing instruments, infrastructure budgets and investment interventions should be synchronised and targeted to begin to shift spatial configuration of the city to engender a participatory and inclusive practice. The State must develop the ability to effectively use existing and devise new innovative instruments for effective spatial restructuring, social equity and better functioning of land and property markets through the various means at their disposal including the strategic alignment of spatial development frameworks, design and location of restructuring zones, zoning and urban edge instruments as informed by Integrated Development Plans. This will include the strategic and incremental targeting of infrastructure investment and upgrading to trigger the crowding-in of public property development in specific nodes, zones and corridors identified in strategic spatial planning and development frameworks to promote densification along public transport spines.

In terms of spatial restructuring, government (all spheres of government, and parastatals to co-operate) should strategically use public land and other State resources such as well-located land, as strategic levers for spatial and social restructuring. Government should lead, by invoking the inter-governmental relations framework, in transferring suitable and well-located public land targeted and prioritised for integrated low-income housing development.

Capacity development

Substantial education and capacity development of municipal officials is an essential component of any attempt to introduce value capture mechanisms. Municipalities are not homogenous. However, they do not detract

from the central argument that the magnitude of the development challenge which the country faces necessitates bold, urgent, decisive and strategic interventions in the market to make it work for the poor.

The introduction of a value capture mechanism like a land value increment tax has the potential to provide much needed revenue, and has the potential to strengthen technical and human resources capacity at local government level.

10.8 CONCLUSION

Urban spaces are the engines of economies, places of innovation and cultural, political and environmental diversity. They are also places of tremendous inequity, poverty, exclusion, challenging stake-holders in all sectors to find sustainable approaches to urban development which reduce poverty and inequality. Good practice has shown that even small interventions in the urban land market can have positive effects on poverty and inequality if strategically planned and well-executed. However, enormous gaps exist in the functioning of the State and its legislative frameworks and policies, especially at local government level, to intervene in the land and property markets and to capture unearned value.

The value capture agenda is still an emerging concept in Southern Africa, and therefore requires significant capacity and dedicated research resources to advance this agenda. The chapter also acknowledges the vested interests in maintaining the status quo regarding the unregulated private consumption of land at the expense of the urban poor, as well as the resistance to changes in the implementation of innovative value capture and land taxation mechanisms by bureaucracies. Meaningful interventions to implement innovative mechanisms require long-term commitment and high-level political buy-in from all spheres of government. To offset the vested interests in maintaining the status quo, the challenges

of bureaucracy and lack of political will, it is important to have civil society organized around issues of land value capture and taxation, so as to put pressure on government to effect the necessary changes. Mobilisation

of South African civil society, together with the development of a global community of practice, will surely provide the impetus needed to counter-balance pervasive market driven practices.

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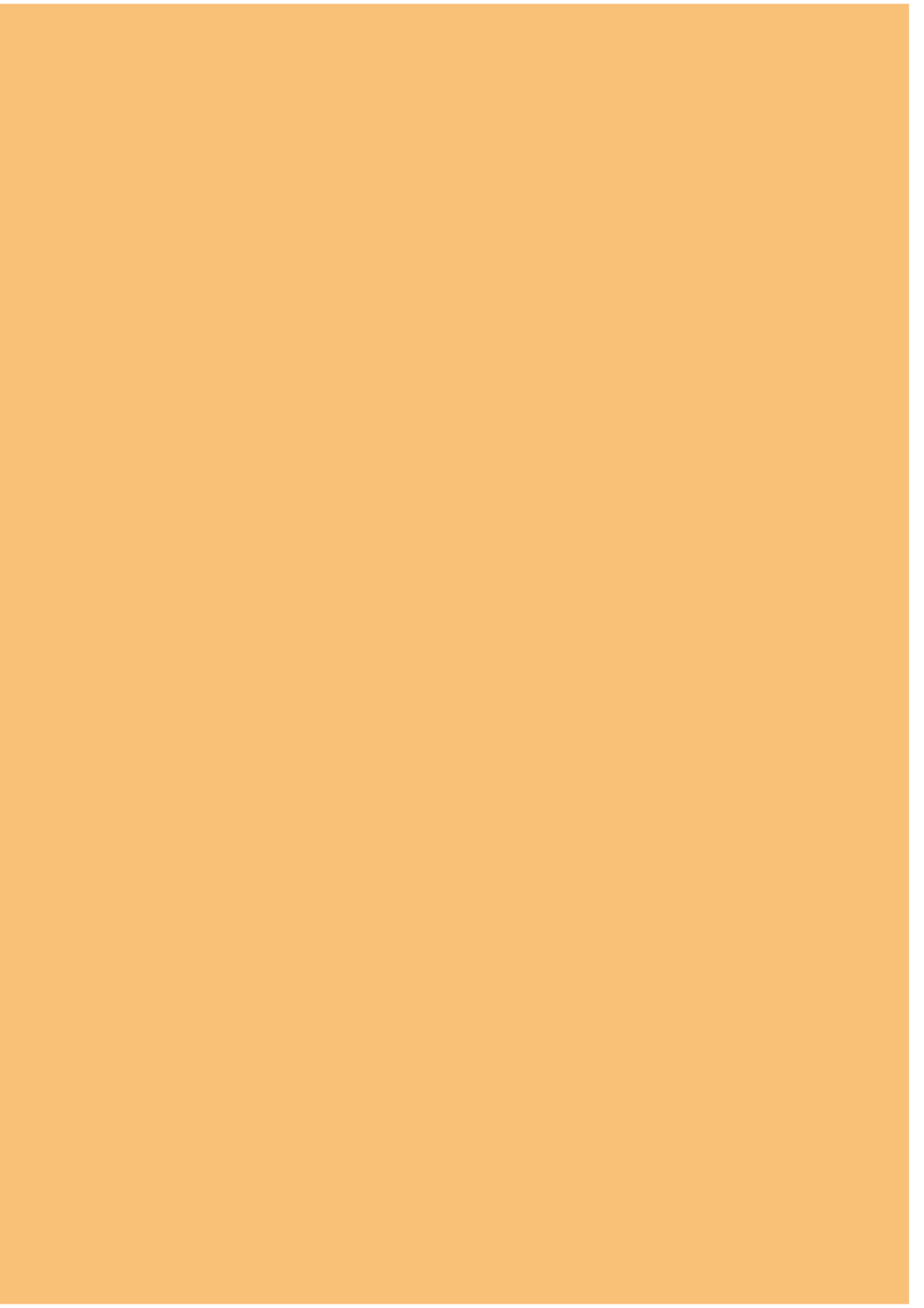
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SECTION 3

LAND and PROPERTY TAXATION and VALUATION TOOLS

11 IMPROVING PUBLIC - VALUE CAPTURING IN URBAN DEVELOPMENT

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Abstract

This chapter focuses on the innovative public practices of capturing land value in urban development (i.e. public-value capturing). There are significant differences between England, Spain (region of Valencia) and the Netherlands. The English and especially the Spanish/Valencian public bodies manage to transfer the bill for paying and/or providing public infrastructure to property developers. Public infrastructure refers to: public roads and space, sewerage, public facilities and buildings, affordable and social housing, etc. In addition, the English and Spanish/Valencian public bodies manage to capture part of the value increase that accrues from re-zoning land. This contributes to the public budget and helps to improve the quality and quantity of public infrastructure. These differences among the countries are mainly the result of differences in their planning system: first the level of certainty about future development possibilities before negotiations between developers and local planning bodies take place; and second whether public bodies dispose of a land readjustment regulation to avoid dependence on private parties to provide the infrastructure.

Keywords: *Public-value capturing, urban development, public infrastructure, landownership, public-private, urban planning, Social and affordable housing, land speculation, land readjustment.*

**(*) This chapter is based on PhD research that I conducted first at the Delft University of Technology and lately at the Radboud University, The Netherlands. The research was supported by the Dutch government (Habiforum Program Innovative Land Use) and the Delft University of Technology (Delft Centre for Sustainable Urban Areas), and has been published at the end of 2010 ('Capturing value increase in urban redevelopment', Sidestone Press). I also want to thank UN-Habitat, GLTN and the Amsterdam School of Real Estate (University of Amsterdam) for sponsoring my participation in October 2009 in the Conference in Warsaw that led to this contribution.*

11.1 INTRODUCTION

Public-value capturing may be considered one of the most important driving forces of public planning, as public bodies hope to at least recover the costs of public infrastructure through the increase in land value. In urban development practice, public-value capturing usually takes place in the context of an agreement between public bodies (municipalities, public planning bodies, public development agencies, etc.), property developers and landowners. Under the notion of ‘public-value capturing’ there are various concepts, such as: ‘cost recovery’, ‘value capturing’ and ‘capturing betterment’. Cost recovery refers to the recovery of costs related to the construction of public infrastructure through contributions from private developers. They may contribute either by building this infrastructure directly or by paying the public bodies to do so. Value capturing is when public bodies that have invested in infrastructure capture the increased land and property values which result from that investment. Capturing betterment refers to a public body capturing the increased value that results from modifying the zoning plans and is irrespective of any incurred costs (Krabben & Needham, 2008: 4; Needham, 2007: 175-178).

There is much discussion about which of these forms of public-value capturing is legitimate, and there are relevant differences in the legal limits to public-value capturing between England, Spain and the Netherlands. England, due to the nationalisation of development rights introduced in 1947 and Spain since the Constitution of 1978, differ radically from the Netherlands regarding the right to the increase in value that accrues from re-zoning the land. In England, public bodies can tax the increased value, but nowadays this does not happen. Instead, what works in practice is a system of planning agreements that allows public bodies to charge property developers a (broad and increasingly previously defined)

set of contributions, including contributions in money for infrastructure situated off-site (outside the development site).

In Spain public bodies have the right to a share in the increased value, which has translated into a right to a percentage of the serviced building plots, which landowners have to deliver for free. Contribution to the realisation and payment of the public infrastructure takes place within a strict predefined set of obligatory contributions and a land readjustment regulation that rules the distribution of the charges among the landowners and the developers. Contributions cover most of the costs of on-site public infrastructure (situated within the development site), and most of the land needed for off-site infrastructure. Additionally, there are also possibilities to agree to more contributions through negotiations.

In 2008 the Netherlands confirmed the previous doctrine that the increased value belongs to the landowner solely. Dutch public bodies are authorised to charge less costs than the English and the Spanish (Muñoz, 2008).

This chapter aims to provide empirical evidence on innovative practices of public-value capturing by first doing exploratory research in several Western European countries, and second by studying cases of urban regeneration on privately owned land in England, the Netherlands and the Spanish region of Valencia. Public bodies in England and especially in Valencia have managed: 1) to make developers provide the public infrastructure, either by paying for it or constructing it; and also 2) to capture part of the increased value. I will focus on two independent variables that are responsible for the majority of these differences. The first independent variable is flexibility in planning, i.e. the level of certainty about future development possibilities before negotiations between developers and local planning bodies take place. Since the 1980s in Spain and since

the 1990s in England, public bodies have been working towards increasing beforehand the certainty about the contributions that developers will have to provide, in kind (e.g. providing the infrastructure, building social housing) or in monetary funds (e.g. paying the municipality). This certainty stimulated the internalisation of these contributions in land prices and land development costs and resulted in an improvement of public-value capturing (Muñoz & Tassan-Kok, 2010).

The second independent variable deals with an important aspect of property rights in land, which is: are public bodies dependent on private parties when acquiring land, gathering financial means and providing the public infrastructure? There is debate in Spain and the Netherlands about the scope of the landowner's rights and the availability of public law instruments to intervene. In the Spanish region of Valencia the debate led to the introduction in 1994 of a new type of land readjustment regulation that has had large positive effects on public-value capturing. Section 2 'Method and data' will summarise the methodology used for data gathering and analysis. Section 3 'International differences in public-value capturing' will provide an analysis of the degree of public-value capturing in each country. Sections 4 'Flexibility in planning' and 5 'Property rights on land' will provide an analysis of the two variables that seem to explain international differences. Finally, Section 6 will draw conclusions on the possible implications of the findings.

11.2 METHOD AND DATA

A fundamental question in case-based research is whether the findings are valid. Central here are the concepts of 'internal validity' (i.e. can the findings explain the studied cases?) and 'external validity' (i.e. can the findings be generalised to other cases?).

This chapter mainly bases its conclusions on data from an explorative research in nine European Union countries and on several cases of urban regeneration in three of them: four cases in Spain (Valencia), three in England and four in the Netherlands.¹ Internal validity was confirmed by a combination of five strategies:

1) Maintaining the context as constant as possible to reduce the risk of spurious third variables:

- We studied countries with somewhat similar political, economic and social contexts to the Dutch context, all of them EU members: the UK, Spain, Germany, France, Italy, Flanders (Belgium), Denmark and Sweden.
- The cases show similarities in terms of landownership situation (privately owned land), the need for significant public infrastructure, and an important value increase of the land due to re-zoning.

2) Maximising the variance in the independent variable, i.e. electing those countries and cases that show the broadest variance in the independent variables 'Flexibility' and 'Property rights', and seeing what happens in the dependent variable 'public-value capturing' (Polit e.a., 2001: 188-192; Swanborn, 1996: 62-64):

- Of the nine countries, Spain and the UK were selected for in-depth research because they showed the widest variation in the level of flexibility and in the definition of property rights

¹ Of the four Valencian urban regeneration projects, three are located in the city of Valencia ('Guillem de Anglesola', 1.2 ha; 'Periodista Gil Sumbiela', 0.6 ha; 'Camino Hondo del Grao', 5.7 ha) and one in the city of Alicante ('Benalúa Sur', 8 ha). The three English projects are located in the city of Bristol: 'Harbourside/Canon's Marsh' (7.8 ha), 'Temple Quay' (7.4 ha) and 'Megabowl' (1.3 ha). The four Dutch cases are located in the cities of Amsterdam ('De Funen', 8 ha), Eindhoven ('Kruidenbuurt Noord', 17 ha), Groningen ('Kop van Oost', 5 ha) and Breda ('Stationskwartier', 16 ha).

in land. Thanks to this variance, the likelihood increases that a possible causal relationship with the public-value capturing variable becomes visible. We focused on England (and not on the UK) and the region of Valencia (and not Spain) because of differences in planning law among the different British constituent countries respectively as among the different Spanish regions;

- In the selected three countries we chose cases that showed innovative features in the independent variables.

3) Repeated measurement: It was possible to apply this strategy for the data gathering in Valencia: here a new planning law in 1994 introduced important changes in independent variable property rights (see section 5), while the context (i.e. the potential third spurious variables like culture, public policies, financial situation of the municipalities, developments in the real estate markets) remained the same. Because of the lack of available dossiers of suitable cases in the period before 1995, this research had to limit the data gathering for that period to literature and interviews. For the period after 1995, besides literature and interviews, this research included research on four cases.

4) Checking for other variables: We systematically checked a list of possible third spurious variables: personal circumstances of those involved, political circumstances and market price of real estate.

5) The external validity (generalisability of the research findings to other cases) was also the goal of diverse strategies. Without a reasonable degree of external validity, the findings in this chapter would run the risk of being supported by overly specific cases.

Several strategies have been taken in order to be able to claim that what happens in the studied cases is not an exception and somehow stands for other urban regeneration cases in the three countries studied and other European countries:

First we selected cases that in some way stand for the main sorts of urban regeneration projects (see Table 11.1).

To further increase the external validity of the findings, other sources of more or less general knowledge have been analyzed:

- Data has been sought about other cases. Sometimes there was quite generalisable data available, especially in Valencia and England;
- Interviews with experts, who gave information about other cases they know.

The case-based findings have systematically been positioned within this more general knowledge. This has allowed assessing their degree of external validity.

England and the Spanish region of Valencia were selected because they show clear exceptional features in the independent variables. Together with the Netherlands, these three countries offer a wide variance. This makes the studied countries more representative as examples of the different values that the independent variables can assume. Many countries show characteristics situated in between this variance.

TABLE 11.1 SELECTED URBAN REGENERATION CASES IN ENGLAND, SPAIN AND THE NETHERLANDS

	VALENCIA	ENGLAND	THE NETHERLANDS
Multifunctional central areas	Guillem de Anglesola and Periodista Gil Sumbiela	Temple Quay	Stationskwartier
Monofunctional residential areas	Guillem de Anglesola and part of Benalúa Sur	(*)	Kruidenbuurt
Old brown-field sites	Periodista Gil Sumbiela, Camino Hondo and part of Benalúa Sur	Megabowl and Harbourside	De Funen and Kop van Oost

Multifunctional central areas consist of city/town central areas and sites around railway stations

Monofunctional residential areas consist of districts with a predominant residential use.

Old brownfield sites are derelict sites: business and other sorts of economic-industrial activities; gas and electricity factories; harbour areas; railway infrastructure; and hospitals, government buildings and military sites.

() It was not possible to find a case in England that would fit within this category.*

BOX 11.1 OVERVIEW OF SOME OF THE CASE STUDIES

Regeneration of Harbourside Canon's Marsh, Bristol, England. This site comprises 7.8ha of land forming the last and largest part of the regeneration of a former dockland. Planning permission became definitive in 2003 with the sealing of a Development Agreement. Initially 60% of the land was privately owned, the rest was owned by the City Council of Bristol. Work on infrastructure provision commenced in 2004. By June 2007 more than half of the development had been delivered or was under construction, and the first buildings were already occupied and in use.

Regeneration of Kop van Oost, Groningen, Netherlands. This site comprises 5ha of vacant land with 60% owned by the former user, a wood-processing company. After negotiations with the municipality, the land has been re-sold twice to commercial developers. Negotiations with the final developer crystallised in 2005 in a Development Agreement. The plan was definitively approved in 2006, including 430 dwellings, most of them apartments, and about 4,000 m² commercial space. In October 2007 infrastructure provision was ongoing.

Regeneration of Benalúa Sur, Alicante, Spain. In 1998 the owners of 60% of the land, led by a small consultancy group that owned 15% of the land, submitted a proposal to rezone the site (8ha, empty plots, some decrepit housing and several industries) into residential and some commercial space. In 2004, the Development Agreement was signed and the detailed land-use plan became definitive. It included about 600 apartments plus some offices and retail space. By 2007 a commercial developer had bought an important share of the land and work had begun on the provision of infrastructure.

Regeneration of Guillem de Anglesola, Valencia, Spain This project comprised 1.2ha of land and included the demolition of old and decrepit housing and the construction of a main road flanked by about 125 new apartments. A commercial developer submitted a proposal in 1999 and becoming the urbanising agent in 2005 after public tender, negotiations and the signing of a Development Agreement. The developer had bought almost all of the land by the end of the land readjustment procedure in 2008, at which time infrastructure provision had not yet begun.

11.3 INTERNATIONAL DIFFERENCES IN PUBLIC-VALUE CAPTURING

When comparing the three countries, there seem to be clear differences in public-value capturing. The differences mainly involve (Muñoz, 2008; see Table 11.2):

- **On-site infrastructure provision costs:** in England and Valencia these are mostly or fully paid by the developers, while the Netherlands has large public subsidies;
- **Land for on-site public infrastructure:** in Valencia this is provided for free by the landowners, while England and the Netherlands used to have a much larger public contribution for providing this land;
- **Social housing:** in England and Valencia they are paid to a large extent or almost fully by the developers, while in the Netherlands this is covered primarily by municipalities and housing associations;
- **Public infrastructure located off-site or on-site but servicing a much larger area:** in England and Valencia developers contribute significantly (in England primarily with financial means while in Valencia primarily with land). In the Netherlands these contributions are very rare;
- **Capturing increased value:** local public bodies in Valencia capture a significant share, even if they own no land. In England public bodies do not profit officially but because of the broad definition of developers' contributions one might conclude the contrary. In the Netherlands public bodies capture increased value only in case they own the land and/or invest and share the risks.

The next sections analyse possible explanations for these large differences. Why is public-value capturing the highest in Valencia, lower but also high in England, and relatively- speaking very low in the Netherlands?

11.4 FLEXIBILITY IN PLANNING

In this chapter we define flexibility as the room for change and alteration in zoning prescriptions during the planning process. This chapter focuses on one specific aspect: the level of certainty about the future development possibilities, related to the period in which public bodies and developers negotiate the terms within which development of the site may take place.

Certainty depends on whether legally binding zoning plans (e.g. land-use plans, planning permission) and indicative zoning plans (e.g. development plans) come into force before or after the negotiations, and on the contents of these documents.

This chapter makes a distinction between two sub-variables (types of certainty): certainty about building possibilities (what, where and how the landowner will be allowed to build), and certainty about future contributions (how much the landowner will have to contribute, in kind or in money).

Negative effect of certainty about building possibilities

In England, Spain and the Netherlands, local public bodies usually create certainty in the early stages, to different degrees, about future building possibilities. In Spain the certainty is the highest, and this happens through the approval of General Land-use Plans, obligatory documents for each Municipality that must cover the whole municipal territory and include detailed prescriptions (see Figures 11.1 and 11.4). This document is legally binding, which means that it provides legal rights to citizens and landowners. For example,

TABLE 11.2 COMPARISON OF RESULTS OF PUBLIC-VALUE CAPTURING: WHO PAYS WHAT IN ENGLAND, VALENCIA AND THE NETHERLANDS?

		ENGLAND	NETHERLANDS	VALENCIA
On-site infrastructure provision costs	Developer	Almost all the costs	Part of the costs	All or almost all these costs
	Public bodies	Indirect through providing cheap land or cheap financing.	Heavy subsidies	No
Land needed for on-site public infrastructure	Developer	Most of the land	Important part of the land	Almost all the land
	Public bodies	Part of the land	Important part of the land	Not much land, only that land that was already public infrastructure
Land needed for on-site public buildings	Developer	Part of the land	Commercial developer none; housing association eventually	Almost all the land
	Public bodies	Part of the land	Most of the land	Not much land, only that land that was already public infrastructure
On-site public buildings	Developer	Not often	Commercial developer none; housing association eventually	Sometimes
	Public bodies	Almost always	Almost always	Almost always
Affordable housing	Developer	Increasing amount of affordable and social housing	Only housing corporations contribute, Commercial developers don't	Almost all
	Public bodies	Partly	Sometimes	Some minor object subsidies
Contributions to off-site public infrastructure & facilities		Developers contribute significantly, increasingly in the last years.	Developers almost do not contribute at all to public infrastructure/facilities outside plan area, and modestly to infra/facilities situated within but serving wider area.	Landowners cede significant quantities of land, and sometimes pay the construction of these infrastructure and facilities.
Capturing betterment		In principle, no	None	Landowners transfer for free 10% of the building volume in green-field sites, and often pay money

Grey: Country in which the developer/landowner contributes the most of the three countries.

Brown: Country in which the developer/landowner contributes the second most of the three.

Light brown: Country in which the developer/landowner contributes the least.

if this document foresees a building on plot X, but afterwards the Municipality decides to change the plan to diminish or eliminate the building, the landowner has right to full compensation for the value of the building as prescribed in the first plan, even if he had not yet constructed it.

In England and the Netherlands, local public bodies usually approve indicative,

not legally binding plans, which create some certainty. Examples of these documents in the Netherlands include Nota van Uitgangspunten, Stedenbouwkundig Plan/Visie; and in England, Local Plans, Development Plans. These documents are not legally binding, meaning that the final plan can easily diverge from them. In addition, these documents used to be very vague and general in their determinations (see Figures 11.2 and 11.3).

FIGURE 11.1 GENERAL LAND-USE PLAN OF THE CITY OF VALENCIA - 1988



BOX 11.2 GENERAL LAND-USE PLANS AND THE CASE OF VALENCIA

In the region of Valencia, as in the rest of Spain, municipalities are obliged by law to approve a legally binding General Land-use Plan. Early in the development process this General Plan prescribes future development possibilities, both in green-field and urban regeneration sites. Figure 1 shows two maps belonging to the 1988 General Land-use Plan of the city of Valencia. The left map zones those sites to be developed in the near future, the right map those to be developed in the longer term. Nowadays the prescriptions of this document are almost all implemented, and the Municipality is working towards a new General Plan. This General Plan prescribes the following:

- It zones land into: (i) existing urban land; (ii) Land to be developed or redeveloped in the future, soon or in the longer term; and (iii) Non-developable land or rural area;
- Prescribes possible building typologies, maximum number of dwellings and sometimes a maximum floor space index (how many m² floor space can be build per m² land);
- Logical phasing of development;
- Main public infrastructure as main roads and parks, new university, etc;
- Land-use determinations for non-developable land;
- Zones land into building regulation zones (e.g. historic city, urban extension, etc).

In green-field sites to be developed in the near future, and in urban regeneration sites, General Plans also prescribe detailed regulations, as height and delimitation of buildings, draft of public infrastructure, etc. In the four cases, the General Plan did indeed prescribe detailed regulations, including the alignment and height of the buildings and a maximum number of m² floor space. Usually, these prescriptions remain unchanged and become effectively implemented, or with minor modifications. However, this is not always the case. There is the possibility of modifying structural elements, after an extensive public procedure, which happened in two of the four studied cases.

FIGURE 11.2 REGENERATION OF HARBOURSIDE/CANON'S MARSH, BRISTOL, ENGLAND



Sources: Maps live; Report from the Head of Bristol Planning Services to Bristol Local Council Committee, 2001.

BOX 11.3 REGENERATION OF HARBOURSIDE/CANON'S MARSH - CASE STUDY VARIABLES

First variable: flexibility in planning

The 1997 Bristol Local Plan zoned the entire site as a 'Major regeneration area', with offices, leisure/tourist activities, and housing (about 200 dwellings). In 1998 the Council approved a Planning Brief that augmented the number of dwellings to 400. However, these documents are of indicative character, which means that they can be changed without extensive procedure, and also that they do not create any right for the landowners. The Council could in theory decide to diminish the building possibilities without this giving to the landowner the right to compensation for the lost virtual building possibilities. After negotiations, the 2003 Planning Permission augmented the total number of dwellings from 400 to 700. The 1998 Planning Brief prescribed also the obligations likely to be paid, including a cross-subsidy for the essential infrastructure and the council's leisure objectives. Although this document did not prescribe any specific amount, it seems that it created enough clarity for the developer to assess, within a margin, the financial feasibility of the scheme. Nevertheless, this degree of certainty was relative. The Council could deviate from the document: for example, during the negotiations, the Council first added the requirement of 30% of affordable housing, to lower the percentage afterwards.

Second variable: Property rights

The developer was not willing to comply with some requirements of the Council, contending that they threatened the financial feasibility of the operation. For example, the developer was against the requirement of constructing 30% social/affordable housing, finally accepting a 9% requirement.

Realised public-value capturing

The developer pays most of the on-site public infrastructure, including roads, public space and expensive soil decontamination. The Council pays a minor part and the public programme English Partnership issues a cheap loan to the developer. In total 50% of the land will be used for any kind of public infrastructure, of which 3/5 are provided by the developer and 2/5 by the Council. The developer will build 9% social housing; of which half are rented units and half are affordable units to sell. In this he will bear a deficit. The developer pays €30.5 million to the Council for major leisure facilities in the neighbourhood and will also provide works to adjacent highways costing between €2 and €7 million.

The findings in all three countries suggest that more certainty beforehand may result in less public-value capturing. It seems that when municipalities prescribe development possibilities early in the development process, this might stimulate land price increases and might also lead to the loss of a valuable negotiation tool. Municipalities might be giving away their 'treasure': that of being the only institution entitled to decide, with certain discretionary powers, if, when and what is allowed to be built. High land prices affect public-value capturing negatively because they jeopardise the financial leeway to finance public infrastructure. However, it was not always possible to measure the actual effect of this sub-variable (certainty about future building possibilities) in this study, mainly because this certainty was similar in almost all cases and there were few examples to the contrary. The conclusions are thus mainly based on reasoning. In addition, this sub-variable seems not always to be the only determinant as a second sub-variable (certainty about future contributions, see below) may play a more relevant role. In other words, certainty about building possibilities, if accompanied by certainty about future contributions, does not necessarily influence public-value capturing negatively.

Positive effect of certainty about contributions

The differences among the countries are larger when we look at the second sub-variable, certainty about what the landowner will have to contribute to public infrastructure.

In Valencia, in the early stages there is much certainty about future contributions. This certainty seems to have improved public-value capturing (see Figure 11.4). The following documents create this certainty:

1. Legally minimum standards, approved for each Spanish region (see Box 11.5 for the standards in the region of Valencia);
2. Local policy, approved by the municipalities (see Box 11.7 for example in the Municipality of Valencia);
3. The above-mentioned legally binding general land-use plans include location and dimensions of main public infrastructure (see Figures 11.1 and 11.4).

In recent years, English municipalities are increasingly creating some certainty through the approval of formal policy on planning obligations.

Nowadays, a majority of local authorities has enacted such policy (Campbell *e.a.*, 2000: 760, 763-764; Department for Communities and Local Government, 2006: 19-20). This policy is mainly of two sorts:

1. Site-specific indicative plans that establish the contributions for the development in question, *i.e.* Bristol's 1998 Planning Brief (Box 11.3);

BOX 11.5 EXAMPLES OF LEGAL MINIMUM STANDARDS FOR RESIDENTIAL SCHEMES IN THE 1998 REGULATION, REGION OF VALENCIA

- Minimum public space: with a floor space index of one m² floor space per m² land, a minimum of 63% of the plan area must be used for public space: 15% for green areas, 20% for public facilities and 28% for roads;
- Minimum number of plots for public facilities: schemes with more than 8,000 m² floor space must provide at least one plot for public facilities.

FIGURE 11.4 REGENERATION OF BENALÚA SUR, ALICANTE, SPAIN



Sources: Maps Live; 2003 Detailed Land-use Plan.

BOX 11.6 REGENERATION OF BENALÚA SUR, ALICANTE, SPAIN - CASE VARIABLES

First variable: flexibility in planning

The 1987 General Plan of the city of Alicante, and its subsequent modification in 1997, prescribed detailed regulations for the Benalúa site, for instance the detailed alignment of public infrastructure and apartment buildings, and a maximum building volume of 103.670 m² floor space for a maximum of 742 dwellings. The 2004 Detailed Land-use Plan fulfilled all these prescriptions, without modifying them. Thanks to the 1987 and 1997 documents, and thanks to the 1998 Regulation, the obligatory contributions were clear beforehand.

Second variable: Property rights

The 1994 Act might have been relevant here. The owners of about sixty percent of the land did join together and undertook initiative submitting the first regeneration plan to the Municipality. Even though another three parties submitted alternative plans, the municipality ultimately selected the owners' proposal. Thus, the old voluntary land readjustment regulation (previous to the 1994 legal modification, in which compulsory land readjustment was only possible when the owners of more than sixty percent of the land supported the plan) would have been sufficient. However, a small consultancy company, owner of only about 15% of the land, was the first to take the initiative. The fact that it could do so without having the support of the other owners may have stimulated them to join the initiative posted by this small consultancy company, as they were aware that the municipality could 'by-pass' them and appoint this small company as the urbanising agent.

Realised public-value capturing

The developer pays the entire on-site public infrastructure, including the roads, park, public space, and a plot for a new school. The school itself will be constructed and paid by the respective public body. In total, almost 80% of the land will be used for any kind of public infrastructure, and the landowners must provide all this land for free. They will also deliver for free a plot of 5.4 ha situated off-site, on which the Municipality intends to construct a new highway. There is no direct link between Benalúa and this new highway. The developer will in addition construct some pipelines that serve not only the new buildings, but also other areas in the City. Finally, the landowners will give for free to the Municipality about 10% of the serviced building plots. The Municipality will sell these plots for a low price to developers, who must build social housing on them.

BOX 11.7 CRITERIA FOR THE RE-ZONING OF THE 1988 GENERAL PLAN OF THE CITY OF VALENCIA, APPROVED IN 2000, MODIFIED IN 2004

- The re-zoning must improve the urban quality: reducing the total building volume, or introducing any other objective improvement.
- Of the total building volume, 20% must be commercial/recreational or affordable housing.
- Compensation: for each new m² floor space, one m² land must be reserved for public facilities (additional to the minimum obligations established by the legal standards and in the General Plan), or 0.5 if the developer uses at least 20% of the building volume for affordable housing. These m² of land may also be ceded off-site, or paid in money.
- If the new dwellings add more than 1,000 inhabitants to the area, landowners have to cede at least 5,000 m² land for a park (additional to the legal minimum cessions).

BOX 11.8 EXAMPLE OF STANDARD CONTRIBUTIONS PRESCRIBED IN BRISTOL'S 2005 SPD4 DOCUMENT

- Affordable housing: in residential developments of 25 or more dwellings or one hectare or more in size, a percentage of the total number of units according to local affordable housing policy (30% in 2007, red.);
- Educational facilities: in residential developments of 40 or more dwellings £9,136 per additional pupil numbers in excess of the capacity of local nursery and primary schools, £14,346 per additional pupil of local secondary schools; the developer is usually required to pay a sum for the provision of off-site facilities, or in exceptional cases to provide these facilities on-site.

2. Non site-specific, generic policy documents that establish standard and similar contributions for the whole municipality. The approval of these generic documents has been stimulated in recent years by the central government in London. An example of this document is Bristol's Supplementary Planning Document Number 4, SPD4, adopted in 2005 (see Box 11.8).

In general for England, there is evidence that local authorities that dispose of standard, already known charges, are able to gain more obligations, in number and in terms of their economic value (Department..., 2006: 19, 22, 27-28, 54). This strengthens the conclusion, based on the studied cases, that certainty about

contributions has a positive effect on public-value capturing. It is expected that in the next years the planning obligations mechanisms will play an important role in capturing some of the development profit for re-investment back into essential infrastructure (Gallent & Tewdwr-Jones, 2007: 211-213, 257).

In the Netherlands there is little certainty ever, created either through legally binding or indicative documents. And if there is some, it is to a limited extent. Only in exceptional circumstances is the amount of future contributions clear before negotiations take place or before the price of land is established. This uncertainty seems to have a negative influence on public-value capturing (see Box 11.4).

There are several explanations for the positive effect of certainty about contributions. First, certainty may have a deflating impact on the price of land, as developers do indeed take account of future contributions when calculating the price to be paid to the landowner, and lower land prices augment the financial leeway for public-value capturing. This explanation fits in with the economic explanations of land price mechanisms (White, 1986: 104-107; Rowan-Robinson & Lloyd, 1988: 128-130; Campbell et.al., 2000: 769-771). Second, certainty influences the negotiations because the obligatory contributions serve as starting point, and because public officers have a strong policy base to require contributions. Tables 11.3 and 11.4 summarise the findings.

11.5 PROPERTY RIGHTS IN LAND

There is a debate in the Netherlands and Spain about property rights in land that has inspired the definition of the second variable. The debates focus on whether the landowner should

have the exclusive right to develop his land, and whether he/she should be able to exclude others from exercising this development right. Also, it focuses on the extent that the law should be allowed to regulate this right. The British nationalisation of development rights in 1947 is an important point of reference in both countries (CPB, 1999; Priemus & Louw, 2000, 2003; Korthals Altes and Groetelaers, 2000; Parejo, 1991; García-Bellido, 1993, 1994; Roca, 2007). The similarities between the debate in the Netherlands and Spain are obvious, e.g. in both countries proposals have been made to separate development rights from the property rights of the landowner. In 1994 concrete steps were taken in Spain; the region of Valencia adopted new legislation that in practice separated infrastructure provision from property rights. Today, this innovation has been introduced in almost all of the remaining 17 Spanish regions. Inspired from this legislation, this chapter explores the effect of one aspect of property rights (i.e. the degree to which public bodies depend on landowners to provide the infrastructure) on public-value capturing.

TABLE 11.3 SUMMARY OF DEGREE OF CERTAINTY IN SPAIN (VALENCIA), ENGLAND AND THE NETHERLANDS

	CERTAINTY BEFOREHAND ABOUT BUILDING POSSIBILITIES	CERTAINTY BEFOREHAND ABOUT CONTRIBUTIONS
SPAIN (VALENCIA)	Always, much certainty	Always, much certainty
ENGLAND	Sometimes, some certainty	Sometimes, some certainty
THE NETHERLANDS	Always, some certainty	Almost never, and limited certainty

TABLE 11.4 SUMMARY OF THE EFFECT OF CERTAINTY ON PUBLIC-VALUE CAPTURING

	CERTAINTY BEFOREHAND ABOUT CONTRIBUTIONS	NO CERTAINTY ABOUT FUTURE CONTRIBUTIONS
Certainty beforehand about building possibilities	++ more capturing value increase	- less capturing value increase
No certainty about future building possibilities	++ more capturing value increase	+ some capturing value increase

Differences in dependence between public and private actors

None of the nine Western European countries studied has a full and clear separation of the right to develop from property rights in land. In all of them, development rights belong to the landowner, i.e. the landowner is always the only one entitled to build on the land (in accordance to the zoning regulations and upon obtaining the necessary permits). However, in Spain, Germany, France and Sweden planning law explicitly refers to providing infrastructure as a 'responsibility' or 'task' of the public bodies, but not of the landowner or the developer.

Having answered the question 'who owns the right to develop' (the landowners in principle, even though in Spain, Germany, France and Sweden, law defines infrastructure provision as a public task and something differentiated from the rest of development rights) was however not specific enough for gathering the empirical data. Therefore, this chapter focused on the power/dependency relationships between the involved actors (municipality, developer, landowners) in each transaction in development processes. Urban development is possible only with the following successful transactions (Alexander, 2001):

1. Land purchase and assembling (obtaining the necessary land);
2. Financing;
3. Land preparation and development (infrastructure provision, which results in serviced building plots);
4. Land disposition (of serviced building plots, ready for construction);
5. Building.

Each step implies transactions (of land, of money). Infrastructure provision can only happen after completing at least the first three transactions. It was possible to distinguish between England and the Netherlands on the one hand and the Spanish region of Valencia on the other hand. In England and the Netherlands the transactions needed for providing infrastructure are very dependent on reaching agreements with the landowners. This is because none of the actors controls all of the necessary resources, i.e. municipalities have a monopoly on regulatory powers (zoning plans and building permits), but the landowners/developers control the land and have the investment capacity. This mutual dependence is very strong; to avoid it, municipalities must get heavily and directly involved, in financial and organizational terms (by expropriating land and constructing infrastructure for example).

On the other hand, in Valencia the 1994 planning law introduced a fundamental change. Before 1994 there was a similar strong mutual dependence, but this dependence disappeared soon after the introduction of the law; municipalities are not dependent anymore on reaching agreements with the landowners.

Besides pre-emption and expropriation, Valencian municipalities can opt for compulsory land readjustment, without having to become directly involved. Landowners can choose for voluntary expropriation or can participate in the development and share the value increase that accrues from re-zoning. If they participate, they are obliged by law to deliver the land needed for public infrastructure and pay to a third party (the urbanising agent) a proportional share of the costs of public infrastructure. If they choose expropriation, the urbanising agent pays the compensation and acquires the land. The municipality selects in a public tender this urbanising agent, who may be a public company but most of the times is a commercial developer. After providing the

infrastructure, the urbanising agent delivers the serviced building parcels to the landowners and transfers the public infrastructure free of charge to the municipality.

In Valencia the public or private developers who provide the infrastructure (the urbanising agents) do not necessarily need to own or control the land, while in England and the Netherlands this is necessary (Muñoz & Korthals Altes, 2007).

Option to wait popular in England and the Netherlands

On the one hand, in Valencia there is no mutual dependence and landowners do not have the option to wait. Although compulsory readjustment is not common, it does play an important role in dissuading landowners from taking actions that may delay development (see Figures 11.4, 11.5 and Box 11.9).

FIGURE 11.5 REGENERATION OF GUILLEM DE ANGESOLA, VALENCIA, SPAIN



Sources: Maps Live; 2005 Detailed Land-use Plan.

BOX 11.9 REGENERATION OF GUILLEM DE ANGESOLA, VALENCIA, SPAIN - CASE VARIABLES

Second variable: Property rights

Neither the initiating developer (Proara, the one who first submitted a regeneration plan), nor the other three developers who in the public tender submitted alternative plans, were linked to the landownership in the area. The possibility of selecting a developer without owning land has been a crucial factor. As there were hundreds of owners (many of them residents or small landlords), it seems unlikely that all these actors would have agreed on a voluntary land readjustment. Therefore, the option to 'by-pass' the landowners has been a crucial factor in redeveloping the site.

Finally, Proara was selected as the urbanising agent and then progressively bought land. The landowners had to accept the full contributions package, and the urbanizing agent accepted additional contributions: an important part of the infrastructure costs that according to planning law should be paid by the landowners, and additional compensation to the owners of the old deteriorated houses.

Realised public-value capturing The developer pays the entire on-site public infrastructure (mainly the new avenue cutting the site). In total, 74% of the land will be used for public infrastructure, of which the landowners provide 2/3 for free. The Municipality provides the other 1/3 (the actual roads). Most of the costs and land are meant for the construction of a new avenue cutting the site. This avenue serves not only this small site, but also a much wider area. In addition, the developer will build between 30% and 50% of the dwellings as social houses to sell.

On the other hand, in England and the Netherlands landowners have the option to oppose the contributions package or other municipal requirements and wait. In the English and Dutch cases, the option to wait was not an exception but rather used quite frequently (see Figures 11.2 and 11.3). This is not an exception in urban regeneration in these countries.

There are several different motivations for landowners and developers choosing the option to wait. First, there is the expectation that longer negotiations lead to higher profits, due to reduced contributions or regular land prices increasing over time. This expectation makes the option to wait the best rational choice from an economic point of view. Another motivation to wait is when municipal requirements are perceived as endangering the financial feasibility of the operation. As we just saw, it is not an exception at all that Dutch and English developers threaten to withdraw the application if the municipality does not lower the requirements. It is however difficult to assess the importance of this third variable (financial leeway of the plan) because of the lack of reliable sources. In the Dutch cases, following estimates based on information given by the developers, the financial leeway appears to be very narrow. However, following my own estimates, there was room for higher contributions (see Table 11.5: posting 8 minus postings 1-7).

To sum up, in the Dutch cases it is not clear if the financial margins were so narrow as to justify such opposition to the municipal requirements. Did developers use the option to wait because it was necessary or did they abuse this option in order to increase their profit margins? In the English cases, following my own estimates, the financial margins were bigger and allowed for greater contributions.

Consequences for public-value capturing

In Valencia, landowners and developers do not have the option to wait, and therefore they cannot refuse the ambitious requirements of municipalities. The end result has been a great improvement of public infrastructure. In England and the Netherlands the option to wait has a negative effect; municipalities often do not demand high contributions or are often forced to lower the contributions package and the quality requirements.

Otherwise they face the risk of not reaching an agreement with the landowners/developers, thus delaying the development of the area (see Figures 11.2 - 11.5).

Higher development costs in England and the Netherlands

This research provided remarkable and unexpected findings by uncovering large differences in the costs of infrastructure provision and plan preparation in the three studied countries. Development costs consist of:

1. Land prices;
2. The cost of constructing public infrastructure;
3. The costs of preparing plans, studies, meetings, tendering the works, etc.;
4. Soil decontamination costs;
5. Compensation costs (compensation to existing owners and inhabitants that must move and/or lose properties);
6. Contributions to public infrastructure;
7. Real estate development costs (the costs of developing and constructing the buildings).

The Dutch cases have the highest infrastructure provision and plan preparation costs (see Table 11.5): in Kruidenbuurt and Kop van Oost respectively €438 and €368 per m² of new public space², in Stationskwartier the cost was

2 'New public space' is the surface that becomes redeveloped and will be used for public uses. Most of infrastructure provision costs relate to the construction of public infrastructure above or under this surface.

much higher, €1,212/m², partially explained by the fact that this figure includes the price of land, soil decontamination, compensation costs and probably contains a hidden profit for the municipality. In the English cases the infrastructure provision and plan preparation costs are €153, €269 and €332 per m². In the Valencian cases they are €94, €693, €103 and €94 per m²; except for the second case these figures can be generalised for the entire Valencian region (Fernández & Fernández, 2002: 68-74; Gascó, 2006: 72-76).

Two Dutch experts confirmed the generalisability of the figures for the Netherlands, with nuances, by analysing three recent urban regeneration cases (see projects 1, 2 and 3 in Table 11.5). Infrastructure provision and plan preparation costs were together €352 per m² new public space in Project 1 and € 265 in Project 2. Such figures are not at all exceptional in urban regeneration in the Netherlands. Project 3 (€118 per m² new public space) suggests that there are exceptions to the general conclusion that these costs are much higher in the Netherlands than in Valencia (Stauttner and Van Bladel, interviews 2008). A possible explanation for the high cost of infrastructure provision and plan preparation costs in England and the Netherlands is that the option to wait has an inflationary effect on these costs. Delay results in additional studies, meetings, etc., increasing the plan preparation costs. In the Dutch Projects 1 and 2, plan preparation costs are €102 and €56 per m² of new public space respectively, while in the Valencian cases they are about €18. Unfortunately, it was not possible to specify these costs for the other Dutch and English cases. Delay and the corresponding uncertainties increase the risks, which translate into higher infrastructure provision costs, e.g. allocating higher reserve lines for unexpected expenses, and generating higher financial costs (loans for high risk projects are expensive, and a longer loan period involves higher costs).

In addition, the option to wait can also have an inflationary effect on land prices; market parties would be more interested in acquiring land to acquire a strong negotiating position. The findings in the Dutch cases seem to support this argument: land was often sold for higher than the market price of the former use. For example in Kop van Oost the estimated market value of the previous use (industrial land) was about €3.6m, but in 2001 it was sold for around €12m, so when it was sold again in 2002 the price must have been even higher. Higher land prices are negative for public-value capturing because they diminish the financial leeway for the developers to contribute.

11.6 CONCLUSIONS

There are large differences in public-value capturing in urban regeneration between England, the Spanish region of Valencia and the Netherlands. Public bodies in England and especially in Valencia managed: 1) to make developers provide the public infrastructure (public roads and space, sewerage, public facilities and buildings, affordable and social housing), either by paying for it or constructing it; and also 2) to capture part of the value increase that accrues after re-zoning land.

In the Netherlands public bodies must subsidise a large part of the public infrastructure. Since Dutch public bodies have been facing severe budgetary cuts in the last two decades and since they cannot rely on private contributions, the quality and quantity of public infrastructure in urban development in the Netherlands has deteriorated. The experience in England and Spain might provide interesting solutions for pursuing larger public-value capturing and public infrastructure improvements.

Two approaches can help to improve public-value capturing. In the first place, the certainty or lack of certainty about future contributions seems to have a relevant effect on land prices

TABLE 11.5 COMPARISON OF DEVELOPMENT COSTS AND RETURNS IN THE VALENCIAN, ENGLISH AND DUTCH CASES - PART I

	VALENCIAN CASES				ENGLISH CASES		
	Guillem	Periodista	Camino	Benalúa	Megabowl	Temple	Harbourside
1. Price of land paid		Not available			€11m	Not available	Not available
2. Infrass prov costs (€/m ² new public space)	€0.66m (€77/m ²)	€1.1m (€418/m ²)	€3.3m (€85/m ²)	€5.5m (€75/m ²)		Estimation: €8.2m (€269/m ²)	€13.1m (€332/m ²)
3. Plan prep costs (€/m ² new public space)	€0.15 (€17/m ²)	€0.7 (€279/m ²)	€0.7 (€18/m ²)	Ca. €1.1m (€19/m ²)	€1.3m (€153/m ²)	€5m	€15m
4. Soil decontamination costs	-	-	Evt costs are included in 2)	Evt costs are included in 2)		No/low	No/low
5. Compensation costs	€1.9m	€2.2m	€7.8m	€1.9m		About €6m	€33m
6. Contributions	-	€1.6m	€14.2m	2.683 m ² floor space	€1.7m	Estimation: €114m (€1,000/m ²)	Estimation: €123m (€1,000/m ²)
7. Real estate dev costs (€/m ² floor space)	No data	No data	€86.5m (€1,150/m ²)	No data	€13.2m (€985/m ²)	€409m	€404m
8. Total returns	No data	No data	€432m	No data	€37.1m		

TABLE 11.5 COMPARISON OF DEVELOPMENT COSTS AND RETURNS IN THE VALENCIAN, ENGLISH AND DUTCH CASES - PART II

	DUTCH CASES			DUTCH CASES (SECOND OPINION)		
	Kruidenbuurt	KopvOost	Stationskwartier	Project 11	Project 22	Project 33
1. Price of land paid	€1.4m + 'boekwaarde' ⁴	at least €12m		€ 14.6m	€0.9m	€31.3m
2. Infrast. prov. costs (€/m ² new public space)				€ 9.8m (€250/m ²)	€6.2m (€209/m ²)	€12.2m (€94/m ²)
3. Plan prep costs (€/m ² new public space)	€24.1m (€438/m ²)	€7m (€368/m ²)		€4m (€102/m ²)	€ 1.7 (€56/m ²)	€3.1m (€24/m ²)
4. Soil decontamination costs	-	€0.5m	€80m (€1,212/m ²)	-	-	-
5. Compensation costs	€5.4m	€0.16m		-	€2.6m	€2.4m
6. Contributions	€0.5m		About €15m	-	-	€1m?
7. Real estate dev costs (€/m ² floor space)	Estimation: €106 m (about €1,200/m ²)	€90m (about €1,600/m ²)	€ 320 m (about €1,300/m ²)	No data	No data	No data
8. Total returns	€150m	€112 m, €139m	€480-520m	No data	No data	No data

and on the negotiations between local public bodies and private parties. Local planning bodies can modify the behaviour and profit expectations of landowners and real estate developers by using their policy-making powers to anticipate the contributions that market parties should make. The important step is for the public bodies to make explicitly clear in a public document what they expect, with proper argumentation. The experience in England and Spain shows the importance of central government policy that stimulates local public bodies to introduce these measures, for example, issuing model documents and giving financial stimuli to those local bodies that produce value capturing policy.

In the second place, this chapter presented evidence that a specific form of shaping property rights on land can improve public-

value capturing, i.e. the Valencian land readjustment regulation that successfully separated infrastructure provision from property rights in land. In addition, the regulation can also have a deflationary effect on the costs for providing infrastructure and preparing plans. This supports the idea that property law in relation to the goal of producing urban space and housing is not only a matter of rights; it also involves obligations. The adoption of a combined approach to property rights and duties, through a land readjustment regulation, may help regulate the initiatives taken by landowners and commercial developers in such a way that they fulfill a greater role in the creation of public infrastructure. It can also help to overcome problems of stagnation in constructing new housing, a serious problem that is not limited to the Netherlands or the UK but also affects numerous other countries, e.g. Sweden.

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12 SPACE SYNTAX AS A TOOL TO ASSESS LAND VALUE

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Abstract

This chapter aims to relate the duality concept of urban economic models; monocentric and polycentric, with the urban morphology theory; space syntax. The basic of urban economic models depends on that index of accessibility within the urban spatial structure playing a significant role in determining the land prices. In this chapter, the index of accessibility was analysed by space syntax parameters to investigate the effect of spatial characteristics on the land prices within the whole urban structure of the city. The findings showed the urban spatial structure of the city generates two patterns of urban movement. Firstly, the pattern of global movement (global accessibility) minimises the trips from the main centre to the edge of the city or from the sub-centre to another sub-centre within the whole urban structure. This global process is determined by global spatial characteristics (mean depth) to value the land price. Secondly, the pattern of local movement (local accessibility), minimises the trips to all activities within the local urban structure of the sub-centre. This local process is determined by local spatial characteristics (local integration and connectivity) to value the land prices. The chapter used the hedonic regression model to analyse the correlations between the spatial characteristics of the urban structure of Wrocław City in Poland as a case study and land prices.

Keywords: *Space syntax theory, monocentric - polycentric model, accessibility, hedonic model, land value, Wrocław.*

12.1 INTRODUCTION

The urban land is a multi-dimensional heterogeneous commodity, characterised by durability, structural inflexibility and functional diversity, as well as spatial immobility. The urban land value is a unique structure of land prices which is determined by a bundle of urban components. According to the popularly-known “location, location, location” hierarchy (Pearson, 1991), the land location within the urban spatial structure has been recognised as the prime factor which has determined the land value for many urban economic studies and models through the last decades.

The most influential depiction model of urban structure was the monocentric city model and recently the polycentric city model. They are described in section 12.2. These urban economic models have taken into account the distance to the city centre or sub-centres as an index of accessibility, to determine the land price. These models deal with the concept of accessibility. This is described in detail in section 12.3, as a geometric distance, without taking into account the effect of urban spatial structure as a function to determine the opportunities of accessibility.

The chapter used a new theory of urban planning and architecture; space syntax theory, to investigate the relationship between urban spatial structure and accessibility. Space syntax provides a configurational description of an urban structure and attempts to explain human behaviours and social activities from a spatial configuration point of view (Hillier and Hanson, 1984). The concepts and principles of this theory are described in detail in section 12.4. In this theory, the index of accessibility was determined by the spatial characteristics of urban structure that were measured by the syntactic parameters of space syntax methodology.

From this perspective, the chapter studied the correspondence between the dual process of urban structure within space syntax methodology and the duality concept of urban economic models; monocentric and polycentric. From this interrelation between the urban morphology theory and urban economic theory, the chapter aims to improve the potential use of space syntax theory as a framework tool of spatial econometrics to value land prices.

The chapter used the hedonic regression model, described in section 12.5, to analyse the correlations among the spatial characteristics of the urban structure of the case study and land prices. The urban spatial structure of Wrocław City in Poland was used as a case study to apply the empirical part of this chapter in section 12.6. The summary of results in addition to concluding remarks are stated in the final section 12.7.

12.2 MONOCENTRIC CITY MODEL

Monocentric city model has been the most influential urban economic model on urban spatial structure for at least three decades. It is the spatial model which was presented by von Thünen’s (1826) theory of agricultural land use and was adapted by William Alonso (1964) who applied it to urban regions. Subsequently, the monocentric model has been subject to numerous cases of research and revision like Mills (1972) and Muth (1969), and more recently Fujita and Thisse (1996) (Anas, et al., 1998).

W. Alonso’s monocentric city model describes the city as a circular residential area surrounding a central business district of a certain radius. In the key concept of this model, it is assumed that employment and population as well as land values are concentrated in one central urban core, which is the most attractive location in the city (Ahlfeldt, 2007). The spatial settings of the monocentric model are that firms and

households will pay more for the value or rental price of property that is located closer to the city centre. At the same time, they will spend less on the transportation costs to work places and services as well as travel time savings (Kraus, 2003). Therefore, the distance to city centre is a key determinant that has frequently been used as a measure to value urban land.

Recently, rapid population growth has caused rising density, congestion, pollution and a scarcity of urban land. At the same time, because of the insufficient space in the historical city centre, a new form of urban spatial structure is being created which it is a polycentric city model (Berry et al., 1993). The first model of a polycentric city was developed by Fujita and Ogawa (1982), where the number, location and spatial extent of the business districts are determined endogenously. The emergence of the new economic geography in the 1990s provided a framework capable of explaining the spatial distribution of cities. In this model the city is a combination of monocentric and polycentric because it is possible that business and residential districts are mixed (Mori, 2006).

When considering this perspective concerning the concept of duality in urban spatial structure, there are several studies dealing with the relationship between the land value and the distance to the main centre and sub centres (small centres or neighbourhood centres) like McDonald and McMillen (1990), Anas, et al. (1998), Franklin et al. (2002) and Ahlfeldt (2007). These studies and debates confirm that a more effective measure of distance within the urban spatial structure is the accessibility. The accessibility provides an important tool for testing the relationship between the spatial structure and travel patterns. It is based on assumptions on how individuals make travel decisions (Handy, 1992).

12.3 ACCESSIBILITY CONCEPTS

The concept of accessibility had been used in a number of fields during the last few decades. The accessibility was defined as ‘the simplicity with which activities in the society can be reached, including needs of citizens, trade and industries and public services’ (National Road Administration 1998). Ingram (1971) has played a key role in putting accessibility into an operational form when subdividing the concept into relative and integral accessibility. Relative accessibility was defined as ‘the degree to which two places (or points) on the same surface are connected’ and integral accessibility as “the degree of interconnection with all other points on the same surface” (Ingram, 1971).

Different accessibility measures were carried out by several researchers. These measures were divided between two different approaches of accessibility; place accessibility and individual accessibility. Place accessibility is derived from patterns of land use, i.e. the spatial distribution of the potential destinations and the magnitude. Measures of place accessibility consist of two elements: a transportation element and an activity element. Place accessibility is usually determined by integral measures that include distance measure, gravity measure, cumulative opportunity measure and utility-based measure, while individual accessibility estimates the accessibility enjoyed by a particular person having particular needs, mobility and monetary and time resources (Makri and Folkesson, 1999).

According to the concept of the duality city and the accessibility measure of distance, there are two levels of accessibility that can be derived. They are global accessibility and local accessibility.

Global accessibility is defined by all the travel trips of individuals to the global activities which are located in the city centre \ or in a large regional centre, while local accessibility is defined by all the travel trips of individuals to the local activities which are located within the small centres or neighbourhood centres (Handy, 1992).

All of these approaches of accessibility have been using 'node-link' representation of transportation network and metric distance measurements as a measure of opportunity to access destinations within the urban structure of a city. These measures have not taken into account the effect of urban structure on the opportunities of accessibility. In other words, how patterns of movements (the opportunities of accessibility) in the urban grid are mainly determined by the spatial configuration of urban structure. From this perspective, space syntax is a theory of urban planning and architecture. It is a methodology for modeling the spatial configuration of urban structure by using a connectivity graph representation. Space syntax provides a configurational description of an urban structure and attempts to explain the human behaviours and social activities from a spatial configuration point of view. The space syntax parameters can be translated as tools to measure the accessibility within the urban structure (Hillier and Hanson, 1984).

12.4 SPACE SYNTAX THEORY

Space syntax is a research programme developed by Hillier and Hanson (1994) at the Unit for Architectural Studies, University College, London. It is a technique that can be used for morphological analyses of buildings, architectural plans, and urban plans. The aim of the technique is to describe different aspects of relationships between the spatial structure of human-made environments and social structures or events (Hillier and Hanson, 1984).

12.4.1 Space Syntax Concepts

There are two important concepts in space syntax analysis, which are represented in convex space and axial space.

Convex Space

Convex space is a two-dimensional space in which all points are directly accessible and visible from all points. The convex space is represented by a convex polygon. A polygon is said to be convex if no line drawn between any two points in that polygon goes outside the polygon (Hillier et al., 1987).

Axial Space

Axial space is a one-dimensional space, represented by an axial line which is drawn between two points and perceived as one directly accessible and visible step passing through at least some points in other convex spaces (Hillier et al., 1987).

12.4.2 Space Syntax Parameters

From these principles and concepts of space syntax theory, quantitative parameters can be derived to interpret and measure the spatial characteristics of an urban system.

Connectivity

Connectivity is defined as the number of axial lines directly linked to each individual axial line in a connectivity graph,

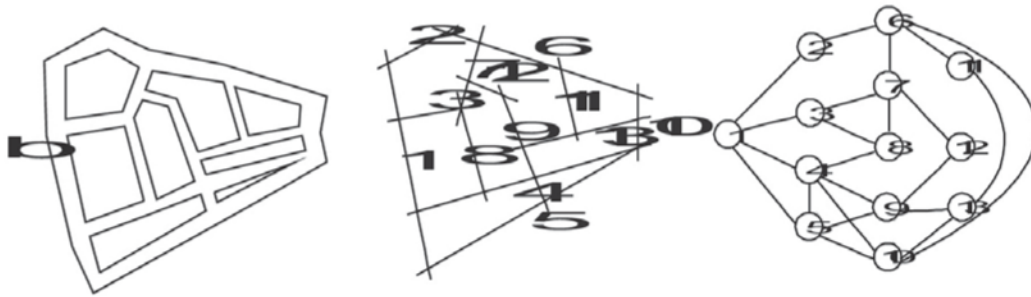
$$C_i = k$$

.....(1)

where k is the number of axial lines directly linked (Jiang and Klarqvist, 2000).

The connectivity graph is a dual graph of an axial map, and it is derived by representing axial lines and line intersections from an axial map as nodes and links respectively, as shown in figure 12.1.

FIGURE 12.1 THE CONNECTIVITY GRAPH OF AXIAL MAP



Source: Jiang and Claramunt 2002

Control Value

Control value is defined as a parameter which expresses the degree of choice each axial line represents for axial lines directly linked to it. The control value ($ctrl_i$) of an axial line (i) is given by the sum of the inverse connectivity values of the jth directly linked axial lines (k) (Jiang and Klarqvist, 2000), as the following equation:

$$ctrl_i = \sum_{j=1}^k \frac{1}{c_j} ctrl_i = \sum_{j=1}^k \frac{1}{c_j} \quad (2)$$

Mean Depth

The Depth (D_i) is simply the topological distance to reach another axial line in the urban system, d_{ij} . Since axial lines are straight, in practice this corresponds to the number of turns an individual would have to make. It follows that the depth from one axial line directly accessible to another axial line is 1. The total depth is the sum of all topological distances between an axial line and all other axial lines (L) in the urban system and is defined as

$$D_i = \sum_{j=1, j \neq i}^{L-1} d_{ij} \dots\dots\dots(3)$$

The mean depth (\bar{D}_i) indicates how close on average an axial line (L) is to all other axial lines in the urban system and is defined as (Hillier and Hanson, 1984)

$$\bar{D}_i = \frac{D_i}{L-1} \quad \bar{D}_i = \frac{D_i}{L-1} \quad (4)$$

Integration Value

Relative asymmetry is defined as the ratio of the difference between the actual mean depth of a line and the minimum mean depth ($D_i - 1$) to the difference between the maximum mean depth and the minimum mean depth ($\frac{L}{2} - 1$).

$$RA_i = \frac{2(\bar{D}_i - 1)}{L - 2} \quad RA_i = \frac{2(\bar{D}_i - 1)}{L - 2} \quad (5)$$

FIGURE 12.2 CONSTRUCTION OF RELATIVE ASYMMETRY



Source: Teklenburg et al., 1993

This transformation standardises the mean depth to a value between zero and one. Figure 12.2 depicts the construction of RA_i (Hillier and Hanson, 1984), (Teklenburg et al., 1993).

Thus, the real relative asymmetry (RRA_i) is

$$RRA_i = \frac{RA_i}{RAD} \quad (6)$$

The integration value is defined as the inverse of RRA_i

$$\text{Integration Value} = \frac{1}{RRA_i} \quad (7)$$

This parameter can be used to describe both global and local spatial characteristics of an urban system. The high value of global integration (R_n) represents a street that is more integrated and more accessible to all other streets in the urban system of a city. Similarly, the high value of local integration (R_3) represents a street that is more integrated and more accessible up to a few streets (3 steps) in the urban system (Hillier and Hanson, 1984).

Global Choice

Global choice is defined as a strong choice value of space when many of the shortest paths, connecting all spaces to all spaces of an urban system, pass through it. Regardless of depth, the urban system—represented as a tree of connectivity graph, which has k spaces (axial lines) and $k-1$ links (intersections of axial lines)—will have only one route from any space to any other. Alternative routes will therefore show themselves as rings in the graph. Spaces can be distinguished from each other according to whether or not they lie on rings, how many rings they lie on, and which rings they lie on (Hillier and Hanson, 1984).

Spatial Configuration

The fundamental correlate of the spatial configuration is movement. This is the case both in terms of the determination of spatial form, in that movement largely dictates the configuring of space in the city, and in terms of the effects of spatial form, in that movement is largely determined by spatial configuration.

The principal generator of this theory is the discovery that the structure of the urban grid considered purely as a spatial configuration, is itself the most powerful single determinant of urban movement, both pedestrian and vehicular. The spatial configuration can be measured by the correlation between the local and global spatial syntactic parameters to describe the part-whole relationship within the urban structure (Hillier, 1996).

Natural Movement

Natural movement is the proportion of movement on each line that is determined by the structure of the urban grid itself rather than by the presence of specific attractors or magnets. Natural movement takes different forms in different cultures, reflecting the different spatial logics of the urban grid. Urban grids are cultural products because they create, through natural movement, and encounter fields with different structures (Hillier et al., 1993). Natural movement is the logic that links spatial configuration to movement. The key element in this relation is that natural movement is a global property of a configuration in that it responds to configurational parameters which relate each spatial element to every other element in an urban system (Hillier et al., 1993).

Movement Economy

The theory of the movement economy was developed from the notion of natural movement; movement flows in different parts of a street network were systematically influenced by the spatial configuration of the network itself. The movement economy theory built on this, and proposed that evolving space organization in settlements first generates movement patterns, which then influence land use choices, and these in turn generate multiplier effects on movement with further feed-back on land use choices and the local grid as it adapts itself to more intensive development (Hillier, 1999).

Every trip in an urban system has three elements: an origin, a destination, and the series of spaces that are passed through on the way from one to the other. The passing through these spaces as the by-product of going from one space to another is determined by the structure of the urban grid (Hillier, 1996).

Location in the grid therefore has a crucial effect. It either increases or diminishes the degree to which movement by-product is available as potential contact. This applies not only to individual lines, but to the groups of lines that make up local areas. In cities, some locations have more potential than others because they have more by-products and this will depend on the structure of the urban grid and how they relate to it. Such locations will therefore tend to have higher densities of development to take advantage of this, and higher densities will in turn have a multiplier effect. This will in turn attract new buildings and uses, to take advantage of the multiplier effect. It is this positive feedback loop built on a foundation of the relation between the grid structure and movement that gives rise to the urban buzz (Hillier, 1996).

12.5 HEDONIC MODEL

The hedonic model is a general equilibrium framework that characterises the pricing of differentiated goods, viewed as bundles of attributes, and the demand and supply of those goods under different assumptions about preferences and technology. It allows for a systematic economic analysis of the demand and supply of quality (Heckman et al., 2003). Quality includes enhancement of the attributes of the goods embodied in a unit of the goods such as the characteristics of a house, quality of public services, school quality, aircraft noise, sports arena or even supportive housing (Ahlfeldt, 2007).

The Model of Evaluation of Land Price

The hedonic regression model of the evaluation of land price was estimated using ordinary least squares (OLS) regression. The dependent variable in this model was the land sale price, and the independent variables were described by their structural characteristics [S], neighbourhood characteristics [N], and spatial configuration characteristics [C]. The formula is:

$$H = f([S], [N], [C]) \quad (8)$$

H is the aggregated value of attribute characteristics, which translates into a market value or sales price (R) following a determined functional relationship (Ahlfeldt, 2007)

$$R = g(H) \quad (9)$$

In urban and real estate economics literature, it is common to choose a log-linear specification, allowing for a non-linear relationship between price and attribute values and being more intuitively interpretable than other non-linear models (Ahlfeldt, 2007). The relationships in (8) and (9) can be formulated more precisely in a regression equation:

$$\log(R) = \alpha + \beta_1 S_i + \beta_2 N_i + \beta_3 C_i + \varepsilon \quad (10)$$

where $\alpha, \beta_1, \beta_2,$ and β_3 are coefficients, i is number of characteristics and ε is an error term (Ahlfeldt, 2007).

Hedonic Model and Space Syntax

Numerous papers have studied the relationships between the distance to city centre as an index of spatial accessibility and the value of a certain location by using the hedonic model. Chae (1998) analysed the effect of the central district's accessibility and location on land price. Chae also drew a conclusion that the effect of accessibility on land price must be analysed with the location factor in order

to obtain more accurate results. Min (2006) employed hedonic analysis, and analysed changes in each variable's influence on land price by comparing each land characteristic's coefficient. Moreover, Lee (2006) proved the correlation between the land's distance from the road and land price by analysing accessibility and the location's effect on land price. Kim and Hwang (2007) applied the hedonic regression model to analyse the influence of land's physical factors (Lee and Kim, 2009). The index of spatial accessibility was represented by the spatial characteristics of urban structure which were analysed and measured by space syntax parameters.

Enström, R. and Netzell, O. (2007) used a space syntax framework and hedonic model to provide a new improved measure of location aiding in understanding of the office – commercial rent pattern in downtown Stockholm. Chiaradia, A. (2009) examined the relationships between location indexing of the street layout with space syntax spatial analysis measures and property value using the Council Tax Band as a proxy for residential property value in the hedonic model (Chiaradia et al., 2009). While, Lee, I. and Kim, Y. (2009) found that spatial configuration characteristic factors, mean depth, integration and choice value, have greater influence on the formation of land price than land use characteristic variables in the hedonic regression model (Lee, and Kim, 2009).

12.6 LAND VALUE AND SPATIAL CONFIGURATION ANALYSIS

In this chapter, the relationship between the spatial configuration of urban structure and land value was investigated and explained by using the multiple linear regression model (hedonic model). The spatial configuration was analysed by applying the space syntax methodology. The land values were selected randomly within whole urban structure of a case study.

The urban structure of Wroclaw was selected as a case study to investigate that relationship between spatial configuration and land value. The analysis of urban structure was applied to two levels. The first level considered the whole urban structure of Wroclaw. The second level analysed one of the sub-centres of Wroclaw that was limited by a syntactic parameter as a suburban structure.

Study Area: Wroclaw City

Wroclaw City was selected as a case study to analyse the relationship between the spatial characteristics and land value. Wroclaw is the capital of the province of Lower Silesia and Poland's fourth largest metropolis. Wroclaw ranked as the 33rd largest city in the European Union; it is a strong economic, academic and cultural centre. Wroclaw is located in the south – western part of Poland, with a total city area of 29,282 km². The total population of Wroclaw is 635,200 inhabitants and the density is 2.36 inhabitants/ km², according to 2006 statistics (<http://www.wroclaw.pl>).

Land Values

There are many types of land value. Market value is one of these types. According to the International Valuation Standards, market value is 'the estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion' (IVSC, 2007).

In this chapter, the market value of land was represented as a sale price of land, the sale price in Polish zloty per one square meter of land. The sale prices of lands were selected randomly and each sale price has a position within the urban structure of Wroclaw. These sale prices were collected from the official web sites of real estate agencies in Poland. The time period covered was between 1 January 2009 and 15 July 2009.

Spatial Configuration Analysis

The author used the space syntax methodology to analyse the spatial configuration characteristics of Wrocław urban structure. These characteristics were represented in each of six syntactic parameters: global integration

(GInte), local integration (LInte), mean depth (MD), global choice (GCh), connectivity (Conne) and control value (CV). These parameters were measured by space syntax software (Mindwalk 1.0).

FIGURE 12.3 AXIAL MAP OF URBAN STRUCTURE OF WROCLAW AND LAND LOCATION WITHIN ZONE RADIUS 300M

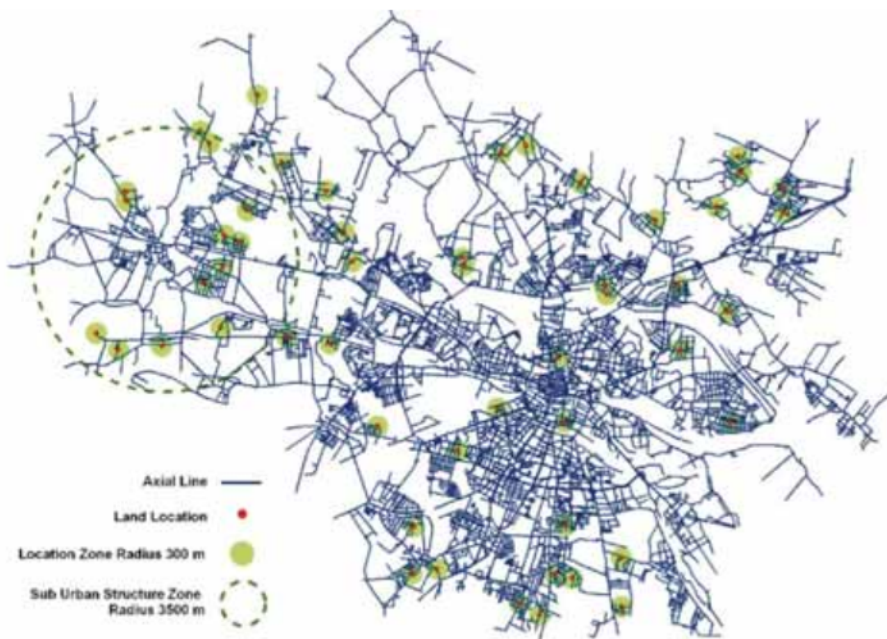


TABLE 12.1: SPATIAL CHARACTERISTICS VALUES OF AXIAL LINES AND LAND LOCATIONS WITHIN THE WHOLE URBAN STRUCTURE OF WROCLAW

Spatial Characteristics	WHOLE URBAN STRUCTURE OF WROCLAW					
	GIntg	LIntg	MD	GCh	Conn	CV
Axial Lines						
Average	0.3739	1.4901	20.4	0.0032	3.1	
Min.	0.1586	0.3333	0	0.0002	1	0.0417
Max.	0.5514	3.6874	54	0.2665	24	10.5
Land Locations						
Average	0.3405	1.5451	25.4	0.0027	3.23	1.1099
Min.	0.2244	0.8617	3.25	0.0002	1.66	0.5417
Max.	0.4972	2.3896	44	0.0202	6.18	2.0613

Source: Author

Spatial Characteristics of Whole Urban Structure

The urban structure of Wrocław was represented as an axial map by drawing the fewest and the longest straight lines through all open spaces of urban structure, as is shown in figure 12.3.

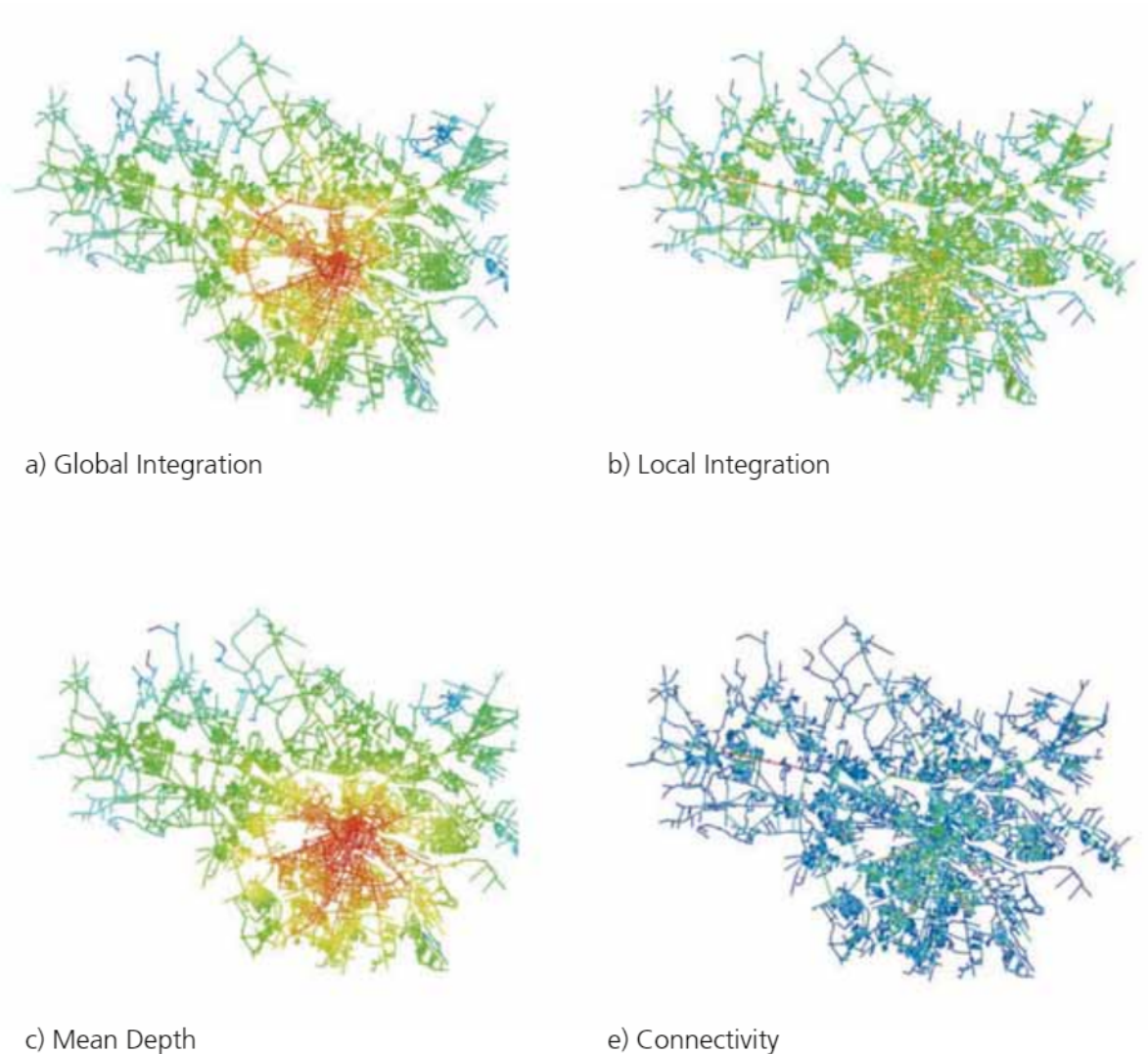
The total number of axial lines in Wrocław is 9922. The spatial characteristics of the whole urban structure of Wrocław were measured in numerical values by syntactic analysis.

The table 12.1 shows the averages of spatial characteristics for the whole urban structure of Wrocław.

Spatial Characteristics of Land Locations within the Whole Urban Structure

The spatial characteristics of land locations were accounted for by measuring the average of spatial characteristics for axial lines that surrounded each land location within zone radius 300 m. Table 12.1 shows the averages of spatial characteristics for all land locations within the whole urban structure of Wrocław.

FIGURE 12.4 SPATIAL CHARACTERISTICS OF AXIAL MAP FOR THE WHOLE URBAN STRUCTURE OF WROCLAW



Source: Author

Spatial Characteristics of Sub Urban Structure

According to the space syntax analysis for the whole urban structure of Wrocław, the author selected one of the sub networks that was determined by a syntactic parameter; local integration. In reality, this sub network is one of sub-centres in the urban structure of Wrocław. It is called Lesnica. Lesnica is a neighbourhood in the northwest corner of the city of Wrocław, located 12 km from the city centre.

The paper studied the axial lines of this suburban structure (Lesnica) within a radius of 3,500m, as shown in figure 12.5. The axial map of the suburban structure has 825 lines. The spatial characteristics of the suburban structure were measured by space syntax parameters within that radius, without being connected to the whole urban structure, as represented in figure 12.6. Table 12.2 shows the averages of spatial characteristics for suburban structures within a radius of 3,500m.

FIGURE 12.5 AXIAL MAP OF THE SUBURBAN STRUCTURE OF LESNICA WITHIN RADIUS 3,500 M

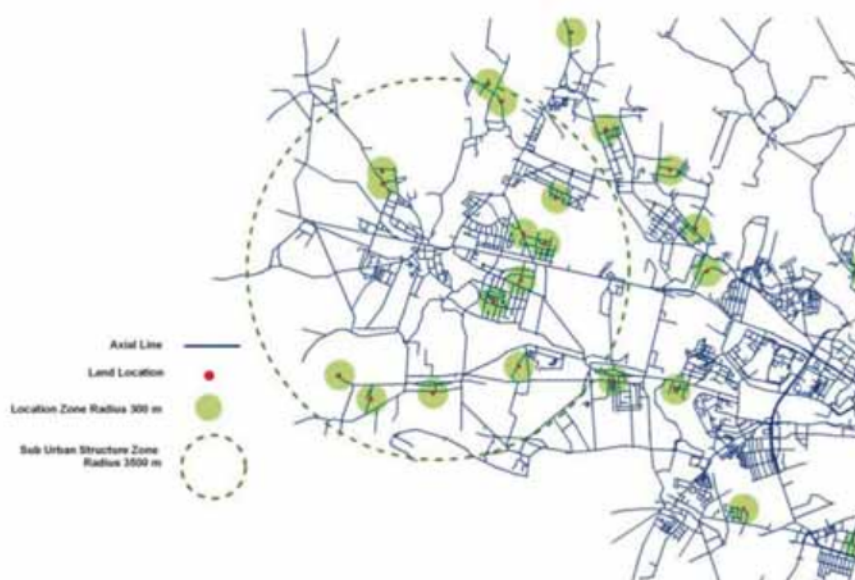


TABLE 12.2 SPATIAL CHARACTERISTICS VALUES OF AXIAL LINES AND LAND LOCATIONS WITHIN THE SUBURBAN STRUCTURE OF LESNICA

Spatial Characteristics	Sub Urban Structure of Lesnica					
	GIntg	LIntg	MD	GCh	Conn	CV
Axial Lines						
Average	0.5580	1.3726	8.85	0.0186	2.8	0.9999
Min.	0.27	0.3333	0	0.0024	1	0.0556
Max.	0.9045	3.1542	26	0.4986	18	6.0206
Land Locations						
Average	0.5075	1.4163	11.22	0.0166	3.02	1.0850
Min.	0.3106	0.9012	2.78	0.0074	2	0.9621
Max.	0.7094	1.8711	22.54	0.0409	4.45	1.3093

Source: Author

Spatial Characteristics of Land Locations within the Suburban Structure

In the suburban structure, the lands were selected in the same locations within a radius of 3,500 m. The spatial characteristics for each land location were determined by measuring the average of spatial characteristics for axial lines that are located around the land position within a radius of 300 m. Table 12.2 shows the averages of spatial characteristics for all land locations within the suburban structure limit.

Hedonic Model Analysis

Using the hedonic model, the multiple linear regressions among the spatial characteristics and land values were analysed. The spatial characteristics were represented in global integration, local integration, mean depth, global choice, connectivity and control value as independent variables; while the land value was represented in a logarithm of land sale price (log Price) as a dependent variable. Statistica8.0 software was used as a tool to analyse the multiple linear regressions and to create the final model of regression.

FIGURE 12.6 SPATIAL CHARACTERISTICS OF AXIAL MAP FOR SUBURBAN STRUCTURE OF LESNICA



a) Global Integration



b) Local Integration



c) Mean Depth



e) Connectivity

Source: Author

Correlation among Spatial Characteristics and Land Values in the Whole Urban Structure

According to the results of the regression analysis, as shown in table 12.3, the mean depth values had the highest correlation negatively with land price at p value <0.0000001. It means; the land price would increase when the mean depth decreased.

The second highest spatial character that correlated positively with land price at p value <0.000001 was the global integration. When the global integration increased, the land price would increase.

The other spatial characteristics, the local integration and the connectivity, had less correlation with the land price positively at p value 0.0001 and at p value <0.001 respectively; while the global choice and the control value had no correlation with land price.

Table 12.4 summarises the final regression model with the confidence interval at 95 per cent level. The final model looked at two important spatial characteristics; mean depth and local integration. The land prices can be predicated by these spatial characteristics in the whole urban structure of Wrocław. The model was specified as follows: $\text{Log Price} = 2.536 + 0.462 * \text{L.Intg.} - 0.021 * \text{M.D.}$

TABLE 12.3 CORRELATIONS AMONG THE SPATIAL CHARACTERISTICS AND LAND PRICES IN THE WHOLE SPATIAL STRUCTURE OF WROCLAW

	Log Pr	GIntg	LIntg	MD	GCh	Conn	CV
Log Pr	1.00	-	-	-	-	-	-
GIntg	***** 0.64	1.00	-	-	-	-	-
LIntg	*** 0.57	*** 0.52	1.00	-	-	-	-
MD	***** -0.68	***** -0.85	** -0.47	1.00	-	-	-
GCh	ns	** 0.51	ns	* -0.29	1.00	-	-
Conn	** 0.45	** 0.47	***** 0.91	* -0.42	ns	1.00	-
CV	ns	ns	* 0.36	ns	ns	**** 0.60	1.00

Correlation significant at: * $p < 0.05$, ** $p < 0.001$, *** $p < 0.0001$, **** $p < 0.00001$, ***** $p < 0.000001$, ***** $p < 0.0000001$, ***** $p < 0.00000001$ / ns Not significant

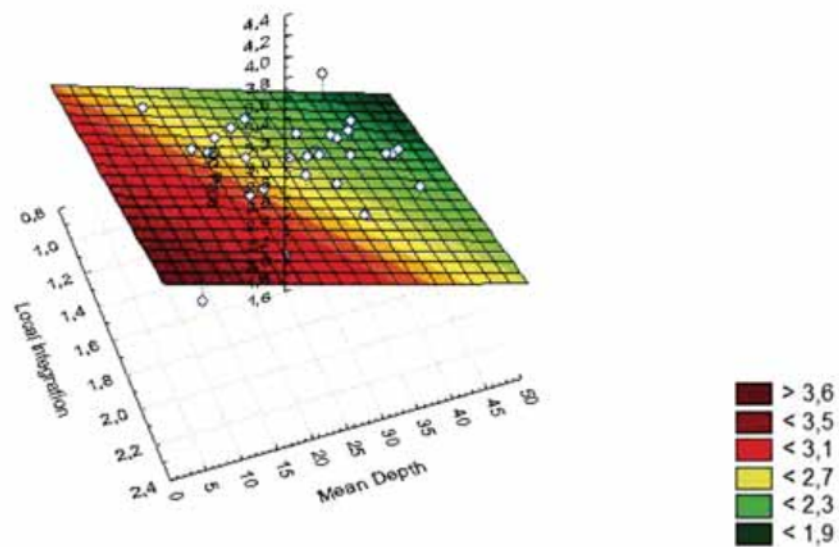
Source: Author

TABLE 12.4 PARAMETERS OF THE FINAL REGRESSION MODEL IN THE WHOLE URBAN STRUCTURE OF WROCLAW

	Param	B1std	t	p	-95,0% Conf	+95,0% Conf
Intercept	2.536	0.309	8.213	0.000	1.916	3.157
MD	-0.0206	0.0043	4.789	0.000	-0.0292	-0.0119
LIntg	0.462	0.157	2.942	0.005	0.146	0.777

Source: Author

FIGURE 12.7 CORRELATION DIAGRAM OF FINAL REGRESSION MODEL OF WHOLE URBAN STRUCTURE



Source: Author

Correlation among Spatial Characteristics and Land Values in Suburban Structure

In the suburban structure, the regression analysis had good correlations with all spatial characteristics. Table 12.5 shows the highest correlation of spatial characteristics with land price were local integration, connectivity and global integration positively and mean depth negatively at p value <0.001 . The second highest correlation with land price was control value and global choice positively at p value <0.05 .

From table 12.6, the final regression model was created with the confidence interval at 95 per cent. The land prices in the suburban structure can be predicated by this final model through two important spatial characteristics. The two predictor spatial characteristics were local integration and global integration. The model was specified as follows:

$$\text{Log Price} = 1.180 + 1.328 * \text{G.Intg.} + 0.715 * \text{L.Intg.}$$

TABLE 12.5: CORRELATIONS AMONG THE SPATIAL CHARACTERISTICS AND LAND PRICES IN THE SUBURBAN STRUCTURE OF LESINECA

	Log Pr	GIntg	LIntg	MD	GCh	Conn	CV
Log Pr	1.00	-	-	-	-	-	-
GIntg	** 0.84	1.00	-	-	-	-	-
LIntg	** 0.86	* 0.75	1.00	-	-	-	-
MD	** -0.82	**** -0.98	* -0.75	1.00	-	-	-
GCh	* 0.59	* 0.75	* 0.70	* -0.68	1.00	-	-
Conn	** 0.86	* 0.78	**** 0.97	* -0.78	* 0.78	1.00	-
CV	* 0.72	* 0.71	** 0.82	* -0.73	* 0.79	*** 0.91	1.00

Correlation significant at: * $p < 0.05$, ** $p < 0.001$, *** $p < 0.0001$, **** $p < 0.00001$

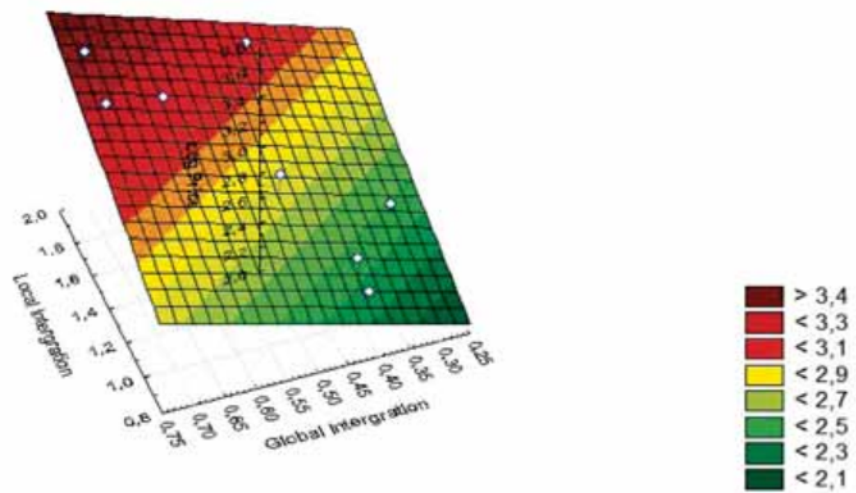
Source: Author

TABLE 12.6: PARAMETERS OF FINAL REGRESSION MODEL IN THE SUBURBAN STRUCTURE OF LESNICA

	Param	B1std	t	p	-95,0% Conf	+95,0% Conf
Intercept	1.1802	0.2528	4.6678	0.0009	0.6169	1.7436
MD	1.3284	0.5938	2.2369	0.0493	0.0052	2.6516
Llntg	0.7105	0.2618	2.7140	0.0218	0.1272	1.2938

Source: Author

FIGURE 12.8: THE CORRELATION DIAGRAM OF FINAL REGRESSION MODEL OF SUBURBAN STRUCTURE



Source: Author

12.7 CONCLUSIONS

As a result, the assessment of land prices of Wrocław will provide investors with crucial knowledge to realise economic vitality for successful urban development. This urban economic knowledge will advise investment through increasing the financial return by unlocking the hidden property value and reducing the risk by improving the development certainty, and will support the strategic design through forecasting the natural movement systems as an economic multiplier for urban development.

In this chapter, the spatial characteristic of whole urban structure, mean depth, had the most significant influence on land prices.

At the same time, the local integration and connectivity are the most significant predictors which have the highest influence on the land prices within the suburban structure. These influences of urban structure on land prices can be investigated as a process.

Globally, the spatial configuration of urban structure generates a pattern of global movement (global accessibility) to minimise the travel trip from specific origin to specific destination as a linear movement. This process minimises the trips from city centre to the edge of city or from centre to another centre through using the typology distance. The typology distance was represented in the mean depth parameter. The whole urban structure of the city is part of sub-urban structures. The

spatial configuration of sub-urban structure generates a local pattern of movement (local accessibility) to minimise the number of travel trips from all origins to all destinations as convex movement. This process minimises the trips to all activities that are located in the centre of the suburban structure through using a local parameter (local integration).

The findings of this chapter confirm that space syntax plays a significant role in assessing and evaluating land prices. It is a helpful tool for real estate actors, valuers, developers and investors in the decision-making process. Predictive modeling with an evidence-based approach would be used to test and design new urban developments, and grow sustainable cities that are mutually beneficial for investment by both the public and private sectors.

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13 CONCLUDING REMARKS AND WAY FORWARD

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This publication, *Innovative Land and Property Taxation*, has provided an overview of various rationales, theories, practices and tools on land-based finance implemented in different parts of the world. The contributions have explored how land and property taxation can effectively contribute to support the provision of infrastructure, services and affordable housing in cities. All contributors underscored the role of land and property taxation as a useful means to raise local and central governments' revenue. In so doing, various methods and approaches were discussed ranging from theoretical to popular, from ideological to more practical, and from conventional to innovative - all supported by various instruments.

The synopsis from various chapters points to the fact that land and property taxes are prevalent in many countries and cities with a degree of domestication. It was noted that the way in which land-based finances operate in cities around the world varies extensively. For example, land and property taxes are charged periodically (e.g. annually or monthly) or during specific transactions (e.g. at time of sale).

When it comes to earmarking land and property proceeds to fund urban development and support affordable housing, the predominant trend is for using tax revenue to operationalise the general economy (national and sub-national budgets) rather than particular government's decisions (e.g.

investment in particular infrastructure, services and housing delivery). Some of the reasoning emerging from the chapters is that urban systems have competing needs that should be funded alongside affordable housing, infrastructure and services. The rationale to justify earmarking the proceeds for a particular location is often politically and administratively challenging. Spain is one of the notable examples where the national legislation requires that local governments collect a betterment tax of between 5 and 20 per cent, earmarked for affordable housing.

This publication clarifies some competing rationales for land value capture including direct and indirect instruments. Some essential definitions on land and property taxation are provided where appropriate. In the context of improving investments in urban areas, some direct instruments include four major categories: a change of property regime (e.g. nationalisation), levies linked to increases in value due to public works (e.g. betterment tax on implementation), taxes on the unearned increment (e.g. capital gains tax) and levies on the increase in value due to land use planning decisions (e.g. grant of planning permission).

The policy implications of such direct instruments were noted as follows: First, tax policies had to be cognisant of local needs and conditions, because, poorly designed policy may negatively affect housing affordability and create more social inequity. Second, it is paramount not to delink tax collecting authorities, tax payers and beneficiaries. In this

scenario, it is clear that the role of participatory budgeting becomes critical. Third, there is an advantage to keep the taxation a local government matter and flexible rather than entrench land and property taxation in national legislation.

The previous chapters also made clear that the indirect land-based instruments were also very popular and widespread. They include obligations (planning, development), gains, fees, cost-recovery, among others. Some countries are using many variants of direct and indirect instruments to contribute funds to urban development and more often to contribute to the general budget.

Some chapters also drew particular attention to the social and ethical implications of land and property taxation in developing countries' urban areas. Of particular interest are the issues of social and ethical responsibility and whether 'informal' urban dwellers should pay taxes on 'illegally' occupied urban land. It was noted that the way in which land and property are registered for taxation purposes often result in costly and incomplete tax rolls, resulting in a low cost of tax emission and collection. The chapters illustrate, however, that there is an overwhelming public perception that tax receipts can provide some evidence of rights. The policy implication is that even informal land holders who are not legally liable to pay taxes, are willing to make tax payments, resulting in high levels of collection. Embracing such citywide land and property taxation requires a revision of the land and property taxations systems, legislation and policies, along with slum upgrading and prevention strategies.

Ten Key messages from this publication

The following ten messages are emphasised throughout the twelve chapters presented in the compendium of cases studies on land and property taxation around the world.

One, there is no 'one-size-fits-all' land-based taxation policy or set of instruments. Countries and cities have experimented with a mixture of land-based taxation tools and regimes that suit their context, culture and history. The results are also mixed. Clearly, plurality and flexibility in land and property taxation (in terms of policies and tools) are necessary and recommended. There is a need to consider land and property taxation tools in the local context and tailor them to suit the local taxation mechanisms. All strategies must also 'match' the prevailing political, institutional, economic and social arrangements. The need for transferability of instruments does not necessary mean system transposition.

Two, it is essential to apply transparent, comprehensive and equitable fiscal incentive mechanisms, as appropriate. For example, in the context of centrally collected taxation revenue, land and property taxation will be made more attractive if local governments are allowed to retain a large part of the property tax revenue they collect. Similarly, tax payers have to be involved in decisions related to land and property taxation issues that affect them. Doing so will stimulate an efficient, accessible and environmentally sound land use as well as an improved use of land-based and other forms of taxation in mobilizing financial resources for service provision by local authorities. The bottom line is to foster sound land governance approaches as one of the requirements for a successful land and property taxation.

Three, it is important to consider fiscal and other measures, as appropriate, to promote the efficient functioning of the urban and peri-urban markets for vacant land, ensuring the sustainable supply of land for shelter, infrastructure, services and other urban development needs. Similarly, taxation interventions do not occur in isolation. For example, there is a tangible relationship between land-based taxation and urban legislation, including urban planning laws.

Similarly, land use policies, urban policies, housing policies, taxation policies and transport policies are all interwoven and should reinforce each other as well as contribute to achieving common goals and objectives (e.g. sustainable urban development).

Four, evidence emerging from the case studies presented here point to the fact that developing and implementing land policy reforms will depend on how readily available the right information is¹ and how sincerely innovative practices for managing land, including land value assessment can be implemented. Reliable, up-to-date and accessible land and property data will go a long way to improve the performance of land and property taxation. In the end, adequate land information systems and land administration systems are key components for viable property taxation regime.

Five, there is a clear and demonstrated benefit between sound land and property taxation policies and revenue that have been re-invested back to the city or to the community. For example, the provision and maintenance of urban public space (parks, play areas, roads, services, safety and security) is a good incentive to improve compliance with paying taxes. Above all, the level of tax evasion is a good barometer to assess the success or failure of a land and property taxation policy.

Six, political will is the first step to make use of innovative instruments that capture gains in urban land development and recover public investment. The chapters presented here have shown that there are a range of practices, instruments, strategies and policy choices for decision makers to make land and property taxation work for all urban dwellers. For such alternatives to perform, the common underpinning factors include demonstrating

how tax revenue is used to invest in tangible urban assets such as affordable housing, infrastructure and services in cities. Further, for change to occur, the political economy of land and property and taking vested interest become part of the challenges to be tackled.

Seven, in a context where urban land and housing prices are beyond the reach of many urban dwellers in developing countries and urban land and housing markets are not favourable to low income dwellers, land and property taxation can be an essential policy tool for levelling the field, redistributing wealth and building cross-subsidies for development gains. Ultimately, the objectives for taxation revenue should be well articulated and politically transparent. Again, land rights and equitable access to land-based resources should not be overlooked in any land taxation venture.

Eight, it is well recognised that in most countries, land and property taxation operate in conjunction and alongside other tax sources including income, production, and sales taxes. This goes to show that taxation interventions in general, and land and property taxation in particular, should not be perceived as a (extra) burden for the tax payer. There is therefore a need to consider taxation as an incentive for investment and a means of enforcing rights (not only obligations) to the city. For example, in some cities, tax receipts have been used to ascertain the (perceived) security of tenure. Such approaches should be encouraged.

Nine, land and property valuation for taxation purposes is one of the most contentious issues facing the implementation of taxation policies. One of the critical lessons to come across in these chapters is to endeavour to clearly define the 'catchment area' because some areas needed revenue more than others which could require calibration of funds between areas. The appraisal and valuation methods should be simple, easily understood, transparent and

¹ Absence, inaccurate and unreliable land information as well as inappropriate land registries and records often undermine the functioning of urban land markets and land/property taxation.

cost-effective. This goes to say that transparency in land administration can play a key role in making land and property taxation work for the benefit of all urban dwellers.

Ten, typically, 40-60 per cent of local government revenue is land-related and therefore remains an important contributor to local (and national) budgets. Many city governments have not designed mechanisms to effectively tax leases and rental agreements for example (the focus has been on formal land and property ownership). In doing so, city governments may suffer from poor tax compliance and recovery and less optimum valuation methods. Clearly, local governments forgo large amounts of potential revenue from land-based finances (e.g. land rent and building, improvement taxes) or leases. Such additional revenue could support the provision of affordable housing, infrastructure and services in cities.

Way forward on land and property taxation

Lessons learnt from the case studies presented in this volume call for greater awareness raising in the importance and role of land and property taxation as a means to sustain urban development. The chapters made clear for example, that many governments (local and national) in developing countries are not using the full potential of land and property taxation to improve urban development. For such awareness to succeed, there is therefore a need to further develop evidence-based policy making by strengthening data and information on land and property taxation, documenting good (and bad) practices as well as highlighting the economic and financial benefits. In fact, data collection, analysis and documentation of land and property taxation cases remain insufficient in many developing countries, despite their centrality to the design of sustainable urban strategies and policies. Better information could then result in institutional, fiscal and political

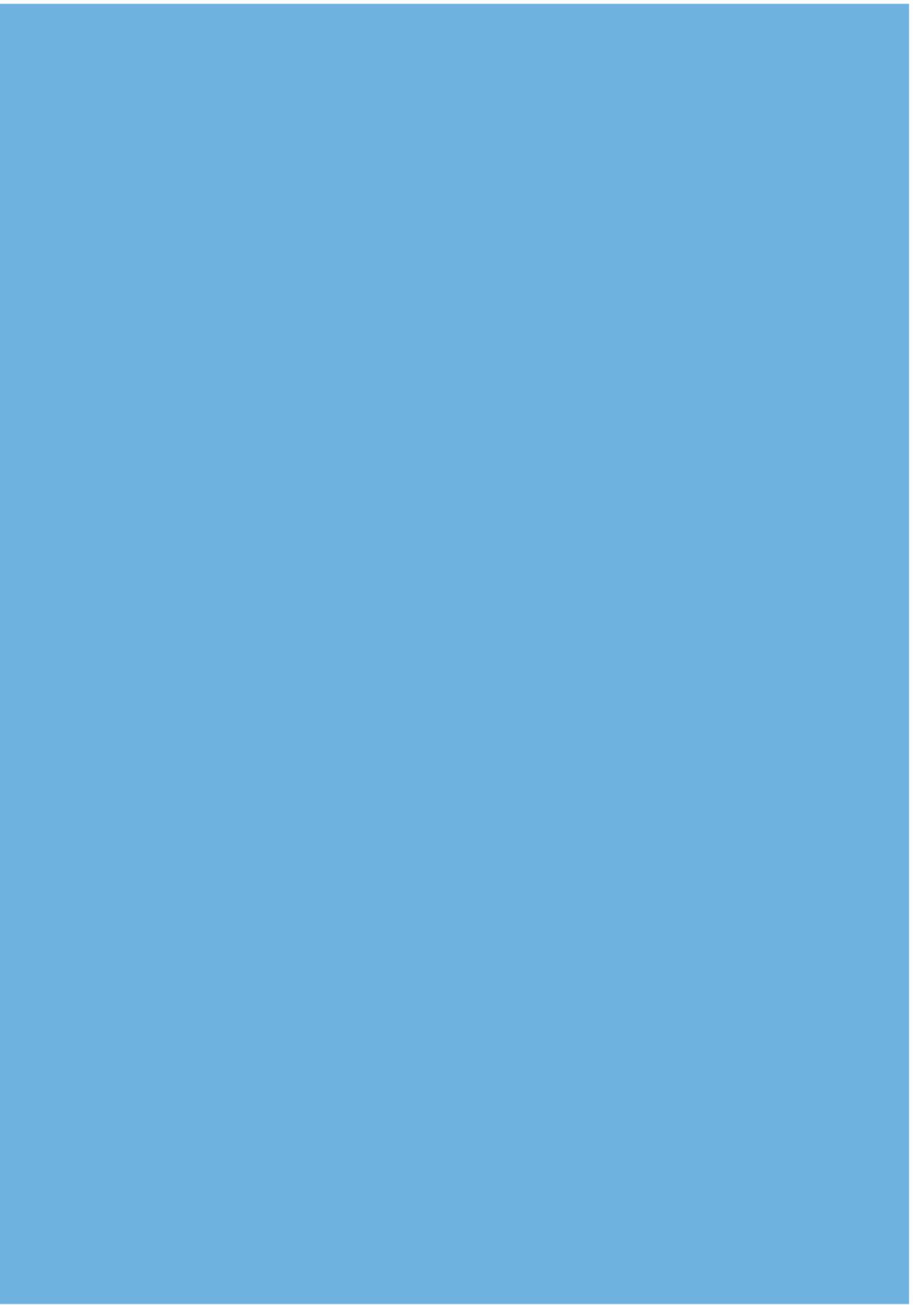
reforms. The foundation of such reform is a land policy process that provides the basis for a sustainable land use, management, governance and administration.

The chapters also made clear that engaging in multi-stakeholder dialogue is critical. Expanding the discourse and advocacy among local and central governments, civil society, academia, and professional groups has become an important avenue to improve knowledge and understanding of various instruments, policies, strategies, practices and experiences on land and property taxation. There is a stream of activities on land capacity development and property taxation that can target specific interest groups (e.g. local governments). Knowledge harnessing and sharing is also an important source of knowledge empowerment. UN-Habitat and the Global Land Tool Network will continue to document land and property taxation practices, instruments, including regional/country comparisons, and disseminate innovative solutions.

The recently published Policy Guide on Land and Property Taxation² is part of this joint effort, as well as the present publication. This publication is part of a series on land and property taxation designed to support HABITAT and GLTN partners in their quest to improve land management, land administration, market, land information and land governance. Some available GLTN publications along the same line include, Urban Land Market, Report of the Warsaw Conference, Land and Property Taxation Guide and much more. Illustrative examples of selected relevant UN-Habitat and GLTN publications on land and property taxation are found towards the end of this volume.

In Annex 1, you will find summaries of three additional papers presented at the Warsaw

² UN-Habitat (2011) *Land and Property Tax: A policy Guide*, Global Land Tool Network, Nairobi, Kenya



ANNEXES

SUMMARIES OF THREE
PAPERS PRESENTED AT THE
WARSAW CONFERENCE,
2009

CAN THE 'UNEARNED INCREMENT' IN LAND VALUES BE HARNESSSED TO SUPPLY AFFORDABLE HOUSING?

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Affordable housing is increasingly becoming a 'gaping hole'. Alterman emphasised the growing problem of exclusion and lack of housing affordability, which is persistent not only in developing countries but also very visible in developed economies, such as the United States. It is thus thought that the 'unearned increment', the rise in land values, could be used to finance affordable housing and other public services and infrastructure. Alterman stresses the importance of the rationales for capturing value, ultimately leading to a specific set of policies depending on the institutional environment. Various direct and indirect value capture mechanisms are analysed. Even though the idea of land value capture is not new, few countries have adopted it in its pure form; since its original conception by Henry George, the idea of land value taxation has morphed into various degrees and forms of the original concept. Experimentation with different instruments is still at its embryonic stage. Alterman analyzes the U.K, represented as the world's laboratory with regard to taxation policies.

AFFORDABLE HOUSING: THE "GAPING HOLE"

Affordable housing resources have decreased substantially in recent years; Alterman linked this to:

- The retreat of governments and reduction of public finance.
- Reluctance of citizens to pay higher taxes.

- Privatisation or semi-privatisation of existing social public housing stocks.
- Regulation which has caused an erosion of the existing affordable housing stocks.
- Regeneration of cities with the omission of affordable housing.
- Exclusionary zoning and gated communities.

There is an ensuing need to research instruments other than direct taxes to finance or incentivise affordable housing. Such instruments are generally associated with planning regulation and land policy.

THE 'UNEARNED INCREMENT': DIRECT AND INDIRECT VALUE CAPTURE MECHANISMS

The issue of dealing with changes in land values caused by planning and zoning is problematic. The question is to whom should the added increment go to and how heavily it should be taxed. In the case of a value decrease, should landowners be compensated? These issues remain in policy planning today. There are two types of value capture mechanisms- direct and indirect. The concepts are often confused; however, they need to be understood as two different entities as they arise from different rationales.

Rationales for value capture

Direct value capture mechanisms refer to an increase in the value of land of private

owners through actions undertaken by public authorities or by the general community. The rationale for capture is thus the fact that the increase in value was not caused personally by an individual and hence should be shared with a broader community. That type of mechanism has generally been slow to catch on.

Indirect value capture mechanisms are used increasingly by various countries and local governments. They result from different legal and policy environments which generally make the use of direct value capture mechanisms problematic. The rationales for these capture mechanisms also tend to differ from the traditional rationales. Alterman described those alternative rationales as concentrated on the anticipated impacts of development. These might include the need to help recover development costs that would otherwise be imposed on public budget; however the local authority should not exact mitigation from the developer in the case of windfalls, as this

BOX A.1 DIRECT VALUE CAPTURE MECHANISMS

Betterment (in contrast to compensation, aggravation): the rise in land values caused directly by a planning or public works decision. Used in UK and former colonies.

Unearned increment: any rise in land values, whether due to public decisions or to the general economy; stressing the fact that the rise is not due to landowners' own initiatives and efforts. Used internationally. **Plus-value:** or value increase - as above, but a more ideologically neutral term. Used internationally.

Windfalls (in contrast to wipe-outs): Coined in the USA.

Givings (in contrast to "takings"): an esoteric take of the reverse US concept.

Source: Alterman 2009

BOX A.2 INDIRECT VALUE CAPTURE CONCEPT AND INSTRUMENTS

Developer obligations (exactions (USA), planning obligations, planning gain (UK), participation (France) cost recovery (Netherlands) : variety of mechanisms used by planning authorities to transfer some or all of the burden of supplying public services, amenities, or environmental mitigation obligations, from the public authority to the developer.

Infrastructure levy: the oldest type of obligations based on betterment rationale; limited to cost of construction

Impact fees or linkage: Preset levels and rules of developer obligations.

Developer agreements: Discretionary obligations negotiated case by case at various levels and for a variety of purposes.

Incentive zoning: (USA) Pre-set two-tier system as an incentive for developers to provide a specific public good e.g. Affordable Housing.

Transfer of Development Rights: based on the ability to transfer the plus value of one development to another so as to compensate those who's planning and development rights have been reduced. However, not usually suited for affordable housing.

Source: Alterman 2009

would constitute a direct capture mechanism. These capture mechanisms are usually more complex and less well defined. Alterman referred to these as ‘developer obligations’.

Additional rationales for the capture of the ‘unearned increment’ listed by Alterman include:

- Reduction of the (political) temptation to misuse planning decisions to enrich individuals.
- Reduction of land speculation by reducing its gains.
- Increasing the trust in government’s planning decisions.
- Reduction of a growing public objection to new development (affordable housing in particular).
- Provision of a financial resource to compensate those whose property values decline due to planning.

CAPTURE MECHANISMS IN PRACTICE

The difficulty in designing and implementing direct unearned increment instruments arises from multiple dimensions that need to be considered. Firstly, the undertaking needs to be anchored legally. Additionally, the taxable cause that created the rise needs to be defined as well as its incidence point. Furthermore the method of payment and the plus value rate need to be agreed upon. This brings the problem of who received the proceeds, and how this revenue is used.

Alterman conducted a twelve country review of direct value-plus capture via the use of betterment taxes. It was found that the concept of betterment taxes still rests in theory rather than practice. The study revealed that the mechanism has only been fully operative in Israel, where the betterment level is high. Spain was pointed out as a country with a partial low-rate quasi-betterment tax. In Poland the betterment tax is newly introduced

and at the moment it is inoperative as it needs further revision. In general, capital gains tax was mentioned as a common way of capturing the unearned increment, existing in the UK, the US and the Netherlands. The researcher also noted a distinctive rise in the use of indirect mechanisms, such as impact fees, linkage, development agreements and incentive zoning.

The UK can be regarded as a world laboratory with regard to experimentation with value capture instruments. A plethora of different modes have been tested, however, they were often removed or changed with the advent of a new government. The rates for recoupment have varied greatly, reaching as high as 100% in the Post War 1947 Act; however they never continued for long enough to enable good evaluation of their benefits. Since 1980, there has been a resounding ‘no’ to direct betterment capture in the UK. The chronological account of the betterment capture mechanisms illustrates how a system wrought with political and ideological complication can lead to an ultimate failure of this type of tax application.

TENTATIVE LESSONS, CONCLUSIONS AND RELEVANCE TO AFFORDABLE HOUSING

The analysis of the cross-country study provides some tentative lessons and conclusions, which can be used directly in relation to affordable housing. First and foremost, sustainable political support is essential in order to implement the capture mechanism, especially for its long lifespan. Implementation of a direct mechanism is difficult as it requires national legislation, which is a politically charged issue, especially if the debate has high public exposure. Additionally, a purely direct tax has high administrative costs. With regard to the use of proceeds from captured value, affordable housing is only one of the competing needs. Affordable housing is a contentious issue; part of the problem is that affordable housing

is disliked due to its negative connotation and thus more difficult to obtain sustained political support as opposed to other public services. The lack of flexibility of the current national laws makes it more difficult to cater to the changing needs of affordable housing. Due to their more flexible nature, indirect instruments can perhaps offer an alternative means of financing affordable housing; their level can be adjusted according to needs. They can indirectly retrieve the plus-value. Nevertheless, the introduction of such instruments is not straightforward; it requires

a high level of skill from local government professionals. In order to make it sustainable, a level of trust in the government and low levels of corruption are necessary.

Concluding, targeting affordable housing is more challenging than targeting traditional public services. The instruments that have been reviewed point to the need of periodic evaluation in order to suit the political and social environment. This is true of both developing and developed nations.

TAXING PUBLIC LEASEHOLD LAND IN TRANSITIONAL ECONOMIES

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The revenue generated from taxing land and buildings is becoming an increasingly important source of finance for economies in transition. Nevertheless, due to specificities of land ownership, transitional economies face a unique context. This makes it more difficult to implement western models of property taxation which generally rely on the premise of private ownership of land. In order to overcome this obstacle Hong suggested three solutions. To simply impose a land tax on publicly-owned land and treat it like private land could distort the newly emerging privately-owned real estate market. In this context, Hong analysed the appropriateness of those solutions by asking three main questions;

1. To what extent would the idea of imposing a property tax on land that is not private property be acceptable to would-be taxpayers in transitional economies?
2. When interests in land are shared between a government lessor and a lessee under a public leasehold system, who shoulders the final economic burden of the property tax?
3. When a uniform tax is imposed on both land and buildings, to what extent would the varied durations of land leases complicate the process of valuing property for tax purposes?

Hong's account provided a context-specific analysis of how taxation systems with regard to leaseholds have the potential to contribute toward future affordable housing and public infrastructure development.

UNDERSTANDING LEASEHOLDS

The main premise of leasehold systems is the fact that land is generally owned by the state. It has been thought that a taxation system could be devised to raise funds to finance services and infrastructure. Due to the heterogeneity of leasehold systems, any alteration or implementation of a taxation system needs to carefully consider individual characteristics of leaseholds because of the varying results it might yield. The most important characteristics are the nature of the lease term and the lease value. With the onset of a market economy, the practicality of the current system is doubtful as payment for the use of land is generally close to nil. However, due to the fact that land

BOX A.3 UNDERSTANDING LEASEHOLDS

A **leasehold** is a type of property tenure-ship. It can be understood as a 'bundle of rights', whereby a party can buy the rights to the land: the right to transfer, develop or lease the land. Unlike a freehold, the right to the land is set for a certain amount of time. Lease durations are usually between 50 and 99 years.

Land Premium (leasing fee): a lump sum payment made to the government, called a Premium System.

Annual Land Rent: annual land rent fees called a Land Rent System.

is state-owned under leasehold systems, the acceptability of imposing a tax on land that is not privately-owned and for which lessees have already paid, is in question.

ACCEPTABILITY

Hong pointed to the fact that applying a tax to 'non-private land tenure arrangements' is a complex issue. Would-be taxpayers do not feel that they should pay for land that they do not own, and compliance problems might ensue. Hence three solutions are being put forward:

Privatization of land

If land is privatised then the issue of ownership as an obstacle to the imposition of land taxation would be overcome. With the embracement of the open doors policy, it was thought that countries would implement a dual system of ownership, which would be phased out as land ownership becomes privatised. Nevertheless, due to the fact that land rent is usually cheaper than property tax, this transformation has been rather slow. The government has to raise taxes to increase its property tax base, which discourages would-be property owners from acquiring property. The social and political importance of communal land tenure has also been an obstacle, privatisation would be seen as acting against national ideologies and customs.

Treatment of Public leasehold rights as private property

In order to overcome the objections to taxing public leaseholds, it has been suggested that public leasehold rights be taxed. However, this approach would require a constitutional amendment, which is difficult to obtain due to legal, political and social circumstances; it is an especially contentious issue in post-communist countries where the public-private debate is highly charged. Future taxpayers and public officials might mistakenly assume

that on account of paying property tax, their leasehold is actually a freehold and that in reality they are the de facto land owners. Education is thus crucial in order not to cause further complications.

Labeling land and building taxes separately

Hong warned that the 'name on the label needs to be correct'. This is because it determines the public reaction which is of political importance. In the case where the owner of land and a building is not that same, it is important to differentiate between the two taxes- property tax on buildings and use tax on land. This would mean having a tax on land use rights and another on improvements. However, the valuation process of the two entities could be arduous.

ECONOMIC INCIDENCE

In any tax system it is crucial to understand who bears the tax burden. Hong pointed out that in the short run, if leasehold rights are fixed it would be the government lessor who bears the burden of tax; this is because future tax liabilities of land users would decrease the demand for land rights and thus decrease the lease revenue. However, if capitalisation of tax payments does take place, it would result in inter-departmental shifts in power (Land bureau tax agency) and in a change in fiscal relationships within government structures.

Despite the decreased lease revenue created by land tax, if capitalisation of public expenditures is turned into increased land values then the decrease would be compensated for. However, it is crucial that the revenue be used to fund services and infrastructure in order to boost the demand. Once the net balance of capitalisation is zero, the revenue generated from land tax will no longer have a detrimental impact on lease income.

TAX ASSESSMENT

Property valuation is an important issue that needs to be considered when implementing a tax system, especially in a public leasehold system. Nevertheless, tax assessment is a complex process and it is difficult to obtain accurate values; Hong pointed out several factors that need to be taken into account. The value of land depends on the lease term and conditions as well as the nature of activity taking place on the site. Hong emphasised the duration of the lease as one of the most important factors.

For long-production cycles a long-term lease is preferable, this is because it is in the economic interest of the owner to invest heavily in the production cycle, which results in an increased land value. On the other hand, if the land lease were short the owner would limit his investment due to the possibility of having to relocate which would be financially burdensome and which consequently would decrease the land value. Conversely, if the production cycle is short then a short-term lease is probably more profitable and would result in higher land value. Such intricacies need to be understood for purposes of mass valuation techniques, however, this field is still severely under-researched.

Another method to appraise leaseholds is based on rental value. However, one must be aware of the discrepancies that could exist between fair market value and contractual rent. The contractual rental price may be significantly below the market price for rental of the same property, if not adjusted periodically. In transitional countries, where rental charges are particularly low, it would be difficult to overcome the unwillingness of taxpayers who might put up a legal and political fight.

POLICY IMPLICATIONS AND RELEVANCE TO AFFORDABLE HOUSING

Despite the above mentioned difficulties, property taxation in leasehold systems is still plausible in transitional countries. If a suitable taxation system is put in place it has a potential to be an important means of funding for services and infrastructure. The method applied (privatisation, treatment of property rights as private property or separation of taxation on land and building) depends on the context of each individual country. Assessment of leasehold value is an essential component of a workable tax system but it is one of the biggest hurdles to be overcome, and valuation techniques are still under-researched. The important point to be made is that the design and implementation of a property tax system needs to go hand in hand with land reforms.

URBAN PLANNING, LAND TAXES AND LEVIES: THE GERMAN EXPERIENCE

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Germany has one of the most efficient and equitable taxation systems in Europe; this point was strongly stressed by Kopietz-Unger in her presentation about the laws and regulations relating to spatial planning and taxation in Germany. The presenter provided an overview of how the current system works in order to ensure the provision of urban infrastructure, such as roads and utilities (drainage, sewerage...) to be installed on a site that is undergoing development. The case put forward is richly illustrated with legal documents, codes and regulations used in specific developments. In the latter part of her presentation Kopietz-Unger elaborated on the region-specific idea of ‘perpetual usufruct’ – the Polish version of leaseholds, and the obligations that land users have under such arrangements.

THE GERMAN ATTITUDE AND PHILOSOPHY

In Germany, it is believed that everyone has the right to housing. The quality of housing and the environment of urban settlements impacts directly on the quality of life and hence the social wellbeing of citizens. The housing market and the housing policy work together to ensure that citizens have the possibility to secure tenureship. Local municipalities, private investment and the Federal policy work together to that end. This entails effective legal-political frameworks with regard to the housing market as well as political instruments to support the endeavour.

The aim of a housing policy is to ensure that everyone has the right to housing, support the creation of residential property and worry in advance about security at old age.

Additionally, it addresses the environmental balance in housing and it constantly strives to reduce the costs of housing provision.

REGULATION AND FEES

Planning Principles

There are two main principles upon which planning in Germany is based:

- Urban planning is used to prevent land speculation;
- Local municipalities and land owners are involved in the planning process. Revenues of municipalities derive from land tax and charges, fees for utilities and levies.

Once a record is made in a spatial development plan there is an automatic change in the level of taxation that is applied to that plot of land. The land tax is governed by Article 106 paragraph 6 of the Basic Law. The revenue from that land tax goes in whole to the municipalities.

Kopietz-Unger pointed out that all developers need to present their projects to the tax authority which calculates taxes based on the appropriate rateable value.

Municipalities collect two types of taxes which need to be differentiated when calculating the rateable value:

- Agricultural Land Tax 'A': levied on agricultural real property.
- Building related Land Tax 'B': levied on improved real property or real property with improvement potential and buildings.

The tax amount is based on several calculations. Firstly, on the use rateable values/replacement economic value (the same value is used for built-up and non-built-up areas). A single rateable value is set by the tax authority which bases its decision on the records in urban plans. The tax authority specifies the base amount of tax based on the rateable value. The basic tax rates, which are used to calculate the base amount using rateable value, are:

- For properties in the old Federal states -between 2.6 and 3.5 per thousand.
- For properties in the new Federal states- between 5 and 10 per thousand.
- For agricultural undertakings- a uniform rate of 6 per thousand.

The proceeds from those taxes must be declared in the municipal budget, together with the rates that are used to calculate their amounts.

Utility fees

It is the responsibility of individual municipalities to collect initial utility fees. The provision of utilities is a pre-requisite for the development of any plot; the provision of local public infrastructure, which in this case conditions the usability of real property, involves water supply and sanitation, electricity, access to communication networks, such as roads. Only when local public infrastructure is provided may a building permit be issued; prospective building land is transformed into building land.

Redevelopment

Municipalities may also levy infrastructure redevelopment charges. Land refurbishment charges are established in urban areas defined by the municipality or the historical conservation office. A mandatory payment is levied when the standard land value increases as a result of redevelopment and is applied once the redevelopment project is completed.

BOX A.4 THE PROCEDURE

The building code regulates utility fees, including land acquisition, adaptation for construction, provision of appropriate utilities (water, sewerage, lighting, roads and paths, parking areas). The owners of the land are responsible for a maximum of 90% of the costs, for the initial provision of utilities. The costs are divided between all the serviced plots; the cost depends on detailed local plans, especially with regard to the type and intensity of construction, the size of the plot and the length of the plot border with a street or road. The municipality decides on the breakdown of the costs.

There are three types of roads, and their classification determines the amount of fees: 1) housing estate streets (25% of the cost is borne by the municipality); 2) housing estate streets for collective use (40 to 50% borne by the municipality); 3) Urban streets for collective use (40 to 75% of the costs borne by the municipality- the higher the use of the road the lower the burden to the plot owners). The municipality can levy fees for road expansion; the owners, leasehold users will be required to pay part of the costs of construction. Fees can be collected to improve a degraded road (full redevelopment after 60 years, or at the earliest, 25 years after the provision of utilities) and expand or repair the road or its sections to create parking spaces, to change lighting, etc.

BOX A.5 PERPETUAL USUFRUCT

Perpetual usufruct: is a term used in Poland for public ground lease. Its historical roots stem from reluctance of the state to give full ownership to private entities. The user has many rights with regard to the land; however the state is still its lawful owner. The 'lease' is usually granted for 40 to 99 years.

Leaseholds: Perpetual usufruct

From the taxation point of view, there is no difference between a freehold and a leasehold type of land title. Ownership of the land belongs to the municipalities, churches or foundations which grant leasehold rights for periods ranging from 75 to 99 years.

After the lease term, the lessee gives the land back to the owner and receives payment for the value of any improvements. Sale of the leasehold or changes to permanent improvements require the owner's consent. The annual lease payment is limited to 4% of the property value, with property being reappraised every 3 to 5 years.

LAND ECONOMY, I.E. THE LEVEL OF RENT ADJUSTMENT

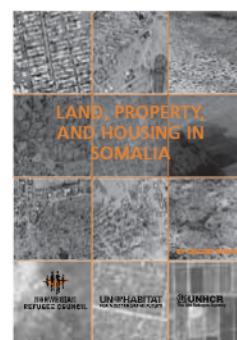
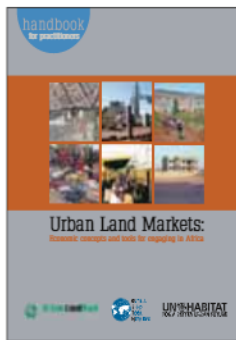
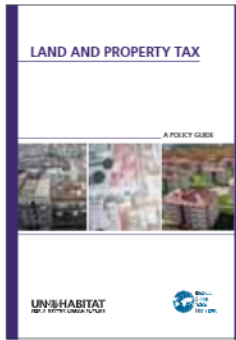
The municipal housing office keeps records of the prevailing rental rates per square meter in a given city area. Landlords and tenants can compare their expectations and make informed decisions regarding a rental agreement. The rental rates available from the municipality are basic rates and do not include the cost of heating, hot water or other services.

CONCLUSION AND RELEVANCE TO URBAN INFRASTRUCTURE

Kopietz-Unger's account of urban planning and taxation is case-specific; it describes the German system, which has been deemed as an example of good practice. The system is well-developed and its effective administration means that it can be efficiently used to provide urban infrastructure and services; developers' contribution is especially significant. Kopietz-Unger asserts that the system guarantees for everyone in the country to be able to enter the housing market and have a fairly good quality of life.

INNOVATIVE LAND AND PROPERTY TAXATION

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THE GLOBAL LAND TOOL NETWORK

The main objective of the Global Land Tool Network (GLTN) is to contribute to poverty alleviation and the Millennium Development Goals through land reform, improved land management and security of tenure.

The Network has developed a global land partnership. Its members include international civil society organizations, international finance institutions, international research and training institutions, donors and professional bodies. It aims to take a more holistic approach to land issues and improve global land coordination in various ways. These include the establishment of a continuum of land rights, rather than a narrow focus on individual land titling, the improvement and development of pro-poor land management, as well as land tenure tools. The new approach also entails unblocking existing initiatives, helping strengthen existing land networks, assisting in the development of affordable gendered land tools useful to poverty-stricken communities, and spreading knowledge on how to implement security of tenure.

The GLTN partners, in their quest to attain the goals of poverty alleviation, better land management and security of tenure through land reform, have identified and agreed on 18 key land tools to deal with poverty and land issues at the country level across all regions. The Network partners argue that the existing lack of these tools, as well as land governance problems, are the main cause of failed implementation at scale of land policies world wide.

The GLTN is a demand driven network where many individuals and groups have come together to address this global problem. For further information, and registration, visit the GLTN web site at www.gltm.net.

ABOUT THIS PUBLICATION

This publication, *Innovative Land and Property Taxation*, is derived from a 2009 Conference in Warsaw, Poland. It presents the ways in which land and property taxation policies, legal frameworks, tools and approaches to sustainable urban development have been experimented with around the World. Its key finding is the prominent role that land-based financing and local authorities play at the core of urban development.

Carrying ten policy lessons, it is a worthwhile reference for policy makers at local and national governments, researchers, land and property tax specialists, urban economists and other urban development specialists.

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