

# **Land Value Capture: Guidance for Practitioners**

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## **ABSTRACT**

The purpose of this paper is to provide decision makers and practitioners working on issues of infrastructure and service finance with standardized information and data that can assist them in selecting and implementing land value capture (LVC) instruments that could be both relevant and beneficial to their cities and countries. The paper analyses all 16 LVC instruments discussed in the literature and used internationally. All the LVC instruments studied in this paper are then classified into three groups, according to their three sources of government authority: (a) government ownership of land; (b) the power to regulate land uses / land-use parameters on both private and public land; and (c) the power to impose taxes and fees (fiscal instruments) on private land/property. The instruments are analysed within a unified framework that is comprised of multiple characteristics (e.g., potential public benefit, breadth of the payers' base, scope of global usage, critical pre-requisites, and implementation requirements, etc.). The framework also includes arguments for and against each instrument. This framework seeks to present a balanced picture of each instrument, and one that is unbiased towards any particular vehicle. The paper also discusses a number of broader issues, including the position of LVC instruments among other municipal own-source revenues and within municipal financial and asset management generally, policies that local governments can pursue to enhance land value prior to enacting LVC instruments, and typical lack of good governance for many of these instruments. The paper then concludes with a discussion of the primary challenges associated with LVCs and suggests possible ways forward.

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## 1. INTRODUCTION

“Land Value Capture” (LVC) is a current terminological incarnation of the concept of “land-based financing” and refers to a group of instruments that governments can deploy in order to extract revenues or in-kind benefits (e.g., public-use facility) from land. The land to which such instruments can be applied may be owned by government or privately held and is typically located in urban or urbanizing areas. Despite the current trend towards the use of the term “value capture,” it is not a formal recognized term in academic economics literature (Abelson, 2018).

Nonetheless, there is extensive research and industry literature dedicated to discussion of specific instruments, including reviews and comparative analyses. However, the literature is far from uniform in its definitions and frameworks regarding LVC instruments. Even the listing of what constitutes LVC instruments varies somewhat in the literature. Further, there is no universal terminology, and what is essentially the same instrument may be referred to differently depending on the region. Finally, in donor-sponsored reports, lists of recommended LVC instruments are often pulled from existing literature without careful consideration of their applicability in the context of a particular country or city.

Frameworks for classifying or comparing LVC instruments also vary. For example, LVC instruments may be framed in terms of their policy objectives such as efficiency, equity, or practicality (Abelson, 2018) or as development-based LVC vs. tax- or fee-based LVC (Suzuki et al., 2015); in addition, instruments may be classified as “direct” vs. “indirect” (Alterman, 2012). Still other publications present compelling examples of the various benefits that particular instruments generate (Peterson, 2013) or discuss how LVC instruments can help to address new global or regional challenges, such as climate infrastructure (White & Wahba, 2017). The existing literature deepens our collective understanding of numerous aspects of LVC instruments. However, there is a limited body of publications addressed towards decision makers who must examine which instruments might be relevant to a specific country or city (Walters, 2016) or to particular activities or projects.

Therefore, the purpose of this paper is to provide such decision makers with an overview that offers a more systematic consideration of each instrument, based on international experiences from the literature and from the authors’ own extensive expertise and experience. The authors possess a vast and deep understanding of LVC instruments stemming from their work on fiscal, land, and governmental reforms and research in 44 countries spanning five continents, at various levels including municipal, national, regional, and global. The targeted audience of this paper is purposefully international and includes project managers at donor agencies, government decision-makers, and technical experts working at or with governments.

We begin in chapter 2 by defining LVC instruments, discussing their nature and proposing a classification framework primarily from the viewpoint of the governmental powers deployed for each instrument. We identify 16 primary LVC instruments that are internationally well-known and classify them into three groups. Chapters 3 – 5 discuss the instruments in each of the three groups, within a unified framework that includes the following:

- a. A brief description of the instrument;

- b. Arguments for and against its use<sup>1</sup>;
- c. Specific pre-requisites for implementation, along with some provisions to be made during the implementation; and
- d. An analysis of how widely the instrument is used internationally,<sup>2</sup> including typical needs or projects it is used for.

Each instrument is illustrated with examples of its use.

Chapters 6 and 7 discuss issues of LVC instruments more broadly. For example,

- a. What is their place among other municipal own-source revenues and, and more broadly, within municipal financial and asset management?
- b. How sustainable are the benefits delivered by each instrument?
- c. What are their systemic prerequisites?
- d. And, perhaps most importantly, what can local governments do to enhance land value, before trying to capture it?
- e. Moreover, what are main challenges associated with LVC instruments and what can be ways forward?

Chapter 8 summarizes the main findings and makes recommendations. Finally, Annex 1 is an important part of this work as it summarizes seven key characteristics of all instruments.

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<sup>1</sup> These considerations are rarely made in the literature, except for a detailed discussion in Santos et al. (2017).

<sup>2</sup> We did not find any publications that made a similar systematic attempt to present the scope of international uses of each instrument.

## 2. The Nature of Land Value Capture

LVC is an umbrella term for the various mechanisms that governments use to fund or recover the costs of building specific public infrastructure or to capture, for broader public benefits, some share of the value of land or property (government may also try to capture a share of an *increase* in land/property value that occurred as a result of land rezoning or public investment in infrastructure).

Benefits from LVC instruments are primarily locally-realized: either as revenues for municipal budgets or as in-kind contributions, either i) direct in-kind contributions, such as land for public use (e.g., streets, public spaces) or land for public infrastructure (e.g., public-use facilities); or iii) indirect in-kind contributions, such as local economic development benefits (e.g. new jobs). It should be noted that in-kind contributions of land or facilities for public use, which some LVC instruments supply, are equivalent to cost avoidance and savings for public budgets.

There is no universally agreed-upon classification of LVC instruments, and, as previously mentioned, even the lists of what constitute LVCs vary in the literature. In particular, a recurring land or real estate tax is included in some reviews and excluded in others; similarly, air rights, joint development agreements, or naming rights have an uneven presence on the LVC lists. Furthermore, the use of terms is not universal either. For example, “developer charges” often meet the same definition as “impact fees.” To address these challenges, this paper (i) includes LVC instruments that have been used in more than one jurisdiction (and normally, more than one country) and (ii) defines each instrument per its most common interpretation, in particular as it is used in countries where it has been implemented.

It is commonly agreed upon by scholars and practitioners that the applicability of LVC instruments depends on the cultural and political traditions of a country and on its system of property rights. For example, the legitimacy of some LVC instruments has been debated and challenged in many countries, in particular whether the government has the right to take a share of the increased value of a property (Alterman, 2012; Munoz, 2008). For example, the Netherlands maintains the doctrine that the increased value belongs to the landowner, while in Spain and the UK governments may tax an increase in land value (though in practice this does not happen in Britain) (Munoz, 2008).

For implementing any LVC instrument, critical questions are: (a) who pays (owners or the developer); (b) whether private sector participation is mandatory or optional; and (c) which level(s) of government must be involved to institute the instrument (legally and organizationally), and which branches within government are central players. In this regard, the classification we suggest may be particularly useful as it helps to answer these questions (see summary table in the Annex).

Specifically, governments can extract LVC benefits through three channels of their authority:<sup>3</sup>

- (i) Directly from *municipally owned land*; for example, selling or leasing such;
- (ii) Indirectly, through *the power to regulate land uses / land-use parameters* on both private and public land; these powers usually include a) defining permitted land uses in

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<sup>3</sup> This classification can be considered as further detailing of the classification used by Suzuki et al. (2017), who distinguished only two groups: development-based and tax- & fees-based instruments.

various urban planning documents (e.g., master plans, detailed development plans, zoning, etc.) and b) establishing - usually in zoning regulations - density limits and other plot-related parameters (e.g., a flow-to-area ratio (FAR), plot coverage, setbacks, etc.); and

- (iii) By applying *the power to impose taxes and fees (fiscal instruments)* on private land / property (though some instruments also impose in-kind contributions).

Table 1 below presents 16 instruments grouped by these three sources of authority they derive from. Fifteen of them are explicitly discussed in the literature as LVC instruments. One—*intensification of land uses on public-use land* (for example, when government introduces co-occupancy for municipal services that in the past used separate properties (e.g., fire and emergency stations))—is an LVC instrument by its nature but has not been recognized as such thus far. We introduce it here as a legitimate LVC instruments for two reasons:

- (i) It has substantial potential to generate direct and secondary public benefits (e.g., increased budget revenues, expenditure reductions, cost avoidance, and reduction of the government-use footprint, which leads to release of extra land for private economic activities), and
- (ii) Although this instrument is still largely underused, when it has been deployed it has yielded substantial benefits, either ad hoc in some cities (e.g., the US) or as an element of explicit policy (e.g., the Netherlands, the UK).

The list in Table 1 excludes *land value increment tax* (Walters, 2016) as a relatively obscure LVC instrument (it also substantially overlaps with the conversion fee and betterment charge).

**Table 1: Associated LVC Instruments, by source of government authority/power used**

<b>Source: Control over government-owned land / property</b>	<b>Source: Power to regulate land uses / land-use parameters</b>	<b>Source: Power to mandate taxes, fees, and in-kind contributions on private land (fiscal instruments)</b>
1. Land/facility leases or concessions	8. Sales of development rights or density bonuses	11. Property tax
2. Land sales	9. Conversion fee	12. Tax Increment Financing
3. Joint development agreements (JDAs) or	10. Land readjustment	13. Betterment charge
4. public-private partnerships (PPPs)		14. Real estate capital gain tax
5. Air rights contracts		15. Real estate transfer tax
6. Naming rights		16. Developer charges / exactions
7. Intensification of land uses on public-use land		17. Special Assessment District

### 3. Gains from municipally-owned land and property

First, we will discuss some generalities about the LVC instruments based on government owned land and property; then, we will discuss each instrument in detail. The instruments in this group can and are used by all levels of government. For local governments (municipalities) these instruments are based on the fundamental fact that they, local governments, have land and built-up properties in ownership (in most countries in the world), and as owners they may use, lease, sell, and otherwise dispose of their properties, though with limitations imposed in some countries by law.<sup>4</sup> Similarly important for the LVC instruments in this group is the fact that as legal entities, local governments may enter into contractual relations.

The first five instruments in this group have the same core nature: a municipality grants rights to use its land or built-up property (or air above the land or the naming rights) to a private sector partner. In return, this private partner contributes funding and skills (such as development know-how) to build on the land (or simply pays for use of the land or built-up property). A product of this cooperation is either real estate for private consumption (e.g. commercial real estate, apartments for sale, etc.) or public use (e.g. a train station, public garage, etc.) or a combination of both. These instruments can also yield less concrete real estate benefits, such as advertising or the right to name a public facility.

The last instrument in this group, *intensification of land uses on public-use land*, is different from the others. Its benefit is in reducing government's footprint and hence saving on the costs and releasing some land for alternative uses. In particular, it may supply land for the first three instruments (leases/concession, sales, and JDAs/PPPs).

A municipality can receive two very different types of benefits from LVC instruments in this first group (i.e. government owned property): either as revenues that contribute to its budget or as an in-kind contribution, such as public-use facility funded - fully or partly - by the private partner (and often built by the partner). However, *how much* revenue or in-kind contribution the municipality receives fundamentally depends on its own decisions about what the private partners are allowed to do with the land. If allowed land uses and permitted density are not attractive from a market demand viewpoint, the result will be a lack of private interest and a reduced land market value, compared to a more ideal situation where favourable land use parameters enhance land value and stimulate private interest. In this regard, municipal governments are in a unique position to “make or break” the market value of land. How they can use this position to maximize benefits from LVC instruments is discussed further in chapter 7.

Revenues from allocating rights to use government land or property to the private sector can be recurring, such as lease or concession payments, or one-time, such as proceeds from land sales. In-kind contributions by investors / developers, such as a public garage, can be obtained through JDAs or PPPs.

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<sup>4</sup> In a limited number of countries, such as China, Egypt, or Ethiopia, local government do not own property but do have the delegated rights from higher levels of government to lease property and use some other instruments.



It should be noted that a difference between some of these instruments can be blurred. For example, a concession, Joint Development Agreement, and a PPP can be quite similar. Instruments used in practice are often hybrids. This is illustrated by examples discussed later in chapter 3, including a deal between the Toronto Parking Authority and a private investor, which combined elements of a sale and a JDA.

From the asset management viewpoint, the instruments such as long-term leases, sales, and commercially oriented JDAs deal with surplus properties (i.e. land or built-up properties not needed for public uses). Therefore, applicability of these instruments depends on the availability of surplus property. This implies, in turn, that these instruments should be used only *after* a local government has a complete inventory of its land and real estate holdings and a classification of these assets that identifies which sites are needed for public uses and which can be disposed of (Kaganova, Kopanyi, 2014). Unfortunately, governments often deviate from this essential first step of asset management and, under pressure to generate immediate revenues, dispose of land without fully understanding how much they possess.

## 1. Land / facility leasing or concessions

This is a very common instrument used by local governments, though policies and practices vary dramatically between and within counties. The process of lease procurement and lease management can and should be standardized, at least within one city. Still relevant for many local governments is a policy choice between long-term leasing of surplus land for commercial real estate or selling it to private users. For local governments that may utilize both options, this choice has been debated in the literature (Bourassa & Yu-hung Hong, 2003). It appears that reluctance to privatize surplus land in some former centrally planned economies is mainly either ideological or historical or based on the interests of political elites, as economic reasoning generally supports privatization of urban land (Kaganova & McKeller, 2006).

In practice, a central problem with government leases is that they commonly do not capture the full revenue potential of municipal land, due to leasing at administrative, below market rates – with the famous exception of China, which paid for its urban infrastructure by auctioning land leases (World Bank, 2014). The magnitude of forgone public revenues from below-market land leases is unknown, but numerous examples in various countries indicate that the losses to public budgets may be enormous (Peterson and Thawakar, 2013; Kaganova, Akhmatov, Undeland, 2008).

<i>Land / facility leasing or concessions</i>	
<p>A lease is a contract that grants a private sector tenant an exclusive right to use a land site, facility or some space in government-owned building for a specified period of time, in exchange for a payment. A concession is very similar to a lease and may differ only in the details of what a tenant may or may not do with the property. Lease / concession payments are usually periodic (e.g., annual) and defined as a specified amount, typically with periodic increases (e.g., by 3% each five years), or as a base amount plus some % of revenue that the tenant/concessionaire earns from the property.</p>	
<i>Arguments for:</i>	<i>Arguments against:</i>
<ul style="list-style-type: none"> <li>• Well-known and accepted in most countries</li> <li>• Short-term leases are used internationally as an effective way of gaining public benefits from temporarily underused/vacant land/property</li> <li>• Voluntary for private sector lessees, therefore, usually doesn't face opposition</li> </ul>	<ul style="list-style-type: none"> <li>• In generally,<sup>5</sup> is not used for long-term commercial land uses internationally (in order to avoid (i) competing with the private sector and (ii) using public land in risky commercial real estate projects)</li> <li>• Often associated with below-market (administrative) pricing and hence under-utilization of revenue potential</li> <li>• More expensive and complicated to administer than ownership</li> <li>• Associated with higher transaction costs in secondary transactions (i.e., mortgaging leased land or selling private buildings on leased land)</li> <li>• Investors with long-term interests prefer land ownership over leases when they have a choice</li> </ul>

<sup>5</sup> Except countries like China or Ethiopia where private ownership of land is not allowed.

	<ul style="list-style-type: none"> <li>• Requires sophisticated legal knowledge on the part of participants</li> <li>• Narrow base for Own Source Revenues</li> <li>• Complicated concession agreements and award processes</li> <li>• Multitude of evidence of corruption and conflict of interest in leasing procurement in countries without strong public governance</li> </ul>
<p><b><i>Key pre-requisites and implementation requirements:</i></b></p> <ul style="list-style-type: none"> <li>• Capacity of local governments for procuring and managing leases</li> <li>• For long-term leasing - inventory of vacant municipal land and long-term land use / disposition plans for such land</li> <li>• Pricing policy in place distinguishing commercial market-price leases from below-market social-service leases</li> <li>• Regulations allowing good-quality leases (e.g., of a sufficient duration ((at least 50 years); subleases permitted by default, various rent structures, etc.)</li> <li>• Regulation establishing transparent, effective procurement process</li> </ul>	
<p><b><i>Geographical coverage:</i></b></p> <ul style="list-style-type: none"> <li>• Leases &amp; concessions are broadly known to municipal governments in most countries; concessions are used mainly for outsourcing municipal services (e.g., water supply systems, landfill construction)</li> <li>• In developed market economies, leasing of municipal land and property is limited mainly by short-term temporary uses for reasons outlined above (see the City of Hague example below)</li> <li>• Exceptions: China and Ethiopia, where private land ownership doesn't exist and government holds monopoly on land supply, so all private activities are based on the leased land. In Amsterdam and Singapore private ownership of land exists but limited by government's massive land nationalization in the past, so most private development takes place on the leased land</li> </ul> <p><b><i>Typical usage:</i></b> A source of general own-source revenues (OSR)</p>	

**Example:**

The City of Hague (the Netherlands), with the population of nearly 540,000, has about 330 commercial leases, all short-term, with a maximum of five years (with five-year renewal), and capital investment by tenants not allowed.

## 2. Land/property sales

As indicated above, this is the alternative to long-term commercial leases. However, land sales have to be associated with prudent policies and pre-requisites, as outlined below.

<b><i>Land/property sales</i></b>	
<p>Privatization (sale in private ownership) of vacant or underused municipal land or built-up property.</p> <p><i>Good practices include:</i></p> <ul style="list-style-type: none"> <li>• Orderly sales according to a strategic land management plan, timed to the market (i.e., in periods of high demand or in order to maintain supply of a particular type of land (e.g., industrial))</li> <li>• Transparent, well publicised auction sales, in order to maximize revenues; in exceptional cases (e.g. a symbolically important land site), land sales can be based on a multi-criteria procurement via requests for proposals</li> <li>• Accumulation of sale revenues in a special budgetary multi-year fund earmarked for capital investment in public infrastructure or for funding systemic reforms</li> </ul>	
<b><i>Arguments for</i></b>	<b><i>Arguments against</i></b>
<ul style="list-style-type: none"> <li>• Mobilizes resources for public capital investment</li> <li>• Revenues can be very substantial as international experiences demonstrate (see below for an example)</li> <li>• Directly contributes to local economic development by releasing vacant or underused land for economic activities (see an example below)</li> <li>• Voluntary for private sector buyers, so doesn't face opposition</li> </ul>	<ul style="list-style-type: none"> <li>• One-time revenue that cannot be sustained in long term</li> <li>• Risk of spending these revenues on operating instead of capital expenses</li> <li>• Risk of haphazard sales, without a long-term land management plan or at the bottom of a real estate cycle</li> </ul>
<p><b><i>Key pre-requisites and implementation requirements:</i></b></p> <ul style="list-style-type: none"> <li>• Explicit policy – local or central - that allows and encourages municipalities to sell vacant, underused, or unwanted properties (e.g., shopping malls on leased land), but only within a framework established by a special regulation</li> <li>• Inventory of all municipal land and property and strategic long-term land use &amp; disposition plan for such land (for 10-15 years) in order to avoid land sales while there is insufficient land for public uses</li> <li>• Regulation in place that establishes a good-practice &amp; risks prevention framework and requirements for land sale procurement and use of proceeds</li> <li>• Optional: A special provision on how the sale can be terminated and land be taken back if a buyer doesn't build on land within a specified time period (e.g., five years)</li> </ul>	
<p><b><i>Geographical coverage:</i></b></p>	

- Most municipal governments in countries where private ownership of land exists use sales of surplus land or property either as i) explicit policy or ii) occasionally in order to either raise revenues for specific capital investment or stimulate development / redevelopment in particular locations

***Typical usage:***

A source of general OSR (as a good practice is earmarked for capital investment or repayment of long-term debt; as a bad practice is used to fill operating budget deficits)

Example:

1. City of Calgary (Canada) industrial land supply<sup>6</sup>

For over 40 years, the city has developed and sold industrial land to the private market - over 2,023 hectares of infrastructure-equipped land to 2,700 businesses, employing about 50,000. The objective of the program is to ensure the availability of land for employment, in particular during slow economic times when it is difficult for private sector developers to work with industrial land. Key parameters of the program:

- *Delivers a one-year supply of “construction ready” small and medium (up to 4 hectares) industrial sites, including a package of all permits*—Larger sites are generally available from private sector developers
- *Is financially self-sustaining and does not receive any public budget support*—Expenses on acquiring raw land, planning industrial parks, and building infrastructure are recovered through revenues from selling ready-to-build land sites
- *Initiates new land development projects only if they are expected to be financially viable, based on feasibility and market studies.*

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<sup>6</sup> Source: City of Calgary, Office of Land Servicing and Housing. 2013-22 Industrial Land Strategy: For the development of City-owned lands

### 3. Joint Development Agreements (JDAs)

This instrument has, in fact, two branches under its umbrella, which are very different from a policy and financial viewpoint. Both cooperate with the private sector, but the first works to profit jointly from commercial land development and the second seeks to avoid or reduce public expenses in delivering a public facility (e.g., a public garage), quite similar to a PPP. In either case, though, JDAs are site-specific instruments, and they require detailed and expensive preparations. Most importantly, their viability and success depend on numerous conditions of the local real estate market, beginning with a need for high demand. Internationally, there have been well-known successful cases in such cities as Hong Kong, Tokyo, or Washington DC, but JDAs with municipal participation are, generally, unique and not reproducible on a mass scale.

<b><i>Joint Development Agreements (JDAs)</i></b>	
<p>A contract between a land site owner (e.g., a municipality) and a developer for joint development of real estate for private or public use – or both. JDAs can be:</p> <p><i>Revenue-sharing</i> when the municipality receives a share of proceeds from sales or lease of speculative real estate (i.e., real estate built for profit seeking), financed and built by the developer, or</p> <p><i>Cost-sharing</i> when the private sector voluntary contributes directly to funding and/or builds and maintains a public-use facility (e.g., railway station), in exchange for some incentives; in this case, JDAs are a form of PPP arrangements for delivery of public infrastructure.</p> <ul style="list-style-type: none"> <li>• JDAs are usually complex and may include land leases and air-rights development agreements.</li> <li>• Conditions and details of JDAs are usually negotiated, not standardized, though initial stages of procurement (e.g., selecting a preferred partner) are competitive.</li> <li>• Revenue-sharing JDAs are often risky profit-seeking real estate projects (e.g. construction of apartments for sale) and are used more as private-private projects, not public-private.</li> <li>• JDAs can be based not only on a contract, but also on creation of a special legal entity, a joint venture (JV). JVs can be especially risky for public partners, because in case of failure this leads to loss of public land or other property contributed into the JV.</li> <li>• JDAs often need to incorporate elements of other LVC instruments (e.g. density bonuses).</li> </ul>	
<b><i>Arguments for</i></b>	<b><i>Arguments against</i></b>
<ul style="list-style-type: none"> <li>• Many international success stories for cost-sharing JDAs in public-private Transit Oriented Development (TOD) projects</li> <li>• Delivers public infrastructure without public monetary investment or with a reduced amount</li> <li>• Voluntary for private sector participants, so doesn't face opposition</li> </ul>	<ul style="list-style-type: none"> <li>• Always site-specific and expensive to prepare—cannot be used on a mass scale</li> <li>• For revenue-sharing JDAs exposes municipal land to risks of the speculative real estate market</li> <li>• Cannot be a stable source of OSR</li> <li>• Cost-sharing JDAs are financially viable only in locations with vibrant real estate markets and high demand (i.e., locations</li> </ul>

	<p>where private investors are interested in building)</p> <ul style="list-style-type: none"> <li>• The negotiation-based, non-transparent nature of final deal may lead to sub-optimal public outcomes</li> </ul>
<p><b>Key pre-requisites and implementation requirements:</b></p> <ul style="list-style-type: none"> <li>• Policy in place that clearly differentiates <i>cost-sharing</i> JDAs from <i>speculative revenue-sharing</i> JDAs; this policy would encourage the <i>cost-sharing</i> JDAs and discourage municipalities or their investment arms from entering into <i>speculative revenue-sharing</i> JDAs</li> <li>• Based on this policy, regulation allowing local governments to enter <i>cost-sharing</i> JDAs for delivery of public facilities / infrastructure but limiting participation in <i>speculative revenue-sharing</i> projects according to the above policy</li> <li>• Very advanced government capacity for conceptualizing, preparing, procuring, negotiating, and managing JDAs</li> </ul>	
<p><b>Geographical coverage:</b></p> <ul style="list-style-type: none"> <li>• Cost-sharing JDAs between government and private partners for delivering public-use facilities are, in fact, PPP contracts widely used in many OECD countries including Canada, Japan, the UK, Spain, etc.</li> <li>• Profit-seeking (speculative) revenue-sharing JDAs are rarely used by governments in countries with advanced market economies, but are broadly used as private-private contracts. An exception are JDAs developed by the Mass Transit Railway (MTR) Corporation in Hong Kong. They also were tested, with many losses for local governments, in countries with former centrally planned economies (e.g. Poland, Serbia)</li> </ul> <p><b>Typical usage:</b></p> <p>To reduce (or restructure) or eliminate public expenses for delivering public-use facilities such as public garages, farmers markets, schools, etc. In Hong Kong are used to co-fund the mass-transit rail system.</p>	

Examples:

1. Toronto Parking Authority (TPA) (Canada): Combined land transfer and Joint Development Agreement

The TPA owned a public garage in poor condition; it sold partial (stratified) rights to a garage site, with a provision for future ownership of parking spaces in the new development. A developer paid CAD 44 million in cash; he built a mixed-use development residential condominium and garage, including 800 public parking spaces (at a cost to developer of CAD 32 million), which are owned and operated by TPA. Developer’s risk included rezoning, construction, development, financing, and market risks, while TPA’s only risk was operating the public garage. Overall direct public benefits consisted of (i) monetized land value (CAD 44 million), (ii) public ownership of 800 new public garage spaces, and (iii) long term municipal recurrent revenues from parking fees.

Source: <https://www.toronto.ca/legdocs/mmis/2012/gm/bgrd/backgroundfile-45140.pdf>

2. The Hong Kong's Rail Plus Property (R+P) program implemented by the Mass Transit Railway (MTR) Corporation. The corporation is responsible for building and operating the city's 218-kilometer MTR system. The corporation initially received government's land along the rail lines at low, before-rail prices, and during slow economic times it receives financial injections from the government. However, in general most of the corporate revenues come from land: over time, the corporation has been selling leases for some sites to developers or developing them jointly with them, as income-generating properties. Given development of rail lines in proximity of the sites, the prices that the corporation obtains are much higher than the initial one at which it received land from the government. Sales of lease rights and commercial income from developed properties have produced, together, 66% of corporation's income over 2000 – 2012. The rest came from the system operating revenues. The corporation returns some of its revenues to the city government by paying dividends to it. From the LVC viewpoint, the MTR corporation deploys a number of instruments: long term leases, JDAs, air rights, and in-kind contributions by developers. As part of China, Hong Kong operates under land leasehold system (Suzuki et al., 2017)



#### 4. Air-rights contracts

<i>Air-rights contracts</i>	
<p>A contract (lease, JDA, or sale) that grants a private sector partner a right to use space above or below government-owned land/building to construct private property, in exchange for a payment. Air-rights contracts can also be between two private parties.</p> <p>Typically, air rights are granted after a road, rail line, or transit station is constructed, so it recovers some of its cost, though it could be applied simultaneously with infrastructure creation. In the latter case, it would be a form of JDA (Levingston &amp; Istrate, 2011).</p>	
<i>Arguments for</i>	<i>Arguments against</i>
<ul style="list-style-type: none"> <li>• Helps increase urban density and economic productivity of land</li> <li>• Creates economic use of otherwise unutilized space</li> <li>• Additional source of revenues for municipal budget</li> <li>• Well-known internationally, though rarely used by government entities</li> <li>• Voluntary for private sector partners, so doesn't face opposition</li> </ul>	<ul style="list-style-type: none"> <li>• Can be financially viable only in locations with high market demand or in unique locations, given that construction cost for air rights is higher than standard</li> <li>• Very narrow base for OSR</li> <li>• Can produce only marginal OSR</li> <li>• Negotiation-based, so may lack transparency</li> </ul>
<p><b><i>Key pre-requisites and implementation requirements:</i></b></p> <ul style="list-style-type: none"> <li>• Regulations allowing air-rights leases or JDAs</li> <li>• Regulation and zoning allowing public-private use of land sites</li> <li>• Capacity of government entity to procure, negotiate, and manage such contracts</li> </ul>	
<p><b><i>Geographical coverage:</i></b></p> <ul style="list-style-type: none"> <li>• Practiced by cities in many countries (e.g., Canada, France, India, Philippines, the US, Poland, etc.), in particular by government entities managing railroads, highways, roads, and by municipalities. In the US, cities with such experiences include Atlanta, Boston, Chicago, Minneapolis, New York City, and Washington DC.</li> </ul> <p><b><i>Typical usage:</i></b></p> <ul style="list-style-type: none"> <li>• To recover (or reduce or eliminate) some costs of public infrastructure</li> <li>• To increase access to transportation nodes</li> </ul>	

Examples:



Hudson Yards development over a railroad depot; New York City, US. Source: <https://builtworlds.com/news/building-nycs-20b-28-acre-hudson-yards/>



Chicago Stock Exchange over Congress Parkway. Source: Will's Photostream cited from <https://www.chipublic.org/blogs/post/technology-that-changed-chicago-air-rights/>

## 5. Naming rights

<b><i>Naming Rights</i></b>	
<p>Naming rights are typically contract-based transactions between two private parties or one public and one private party, whereby a buyer obtains the right to name the property owned by the seller. Usually these are temporary rights, for a duration of between three and 20 years. Payments within such contracts can be one-time or periodic, and usually are used by owners or operators of properties to defray some part of O&amp;M expenses. In rare cases, payments for the naming rights can contribute to capital expenses. Types of properties where naming rights are commonly used include transportation facilities (e.g., train and subway stations, maintenance and parking facilities), multi-function arenas, performing act venues, stadiums, and school facilities.</p> <p>Non-contractual arrangements can also be made for naming rights; these include cases when a facility (e.g., a hospital) is named after a donor.</p>	
<b><i>Arguments for</i></b>	<b><i>Arguments against</i></b>
<ul style="list-style-type: none"> <li>• A simple way of generating additional revenues for funding O&amp;M, especially if there is a shortage of funding</li> <li>• Allows owner to avoid or reduce unpopular mandatory increases of user fees (e.g., cost of subway rides)</li> <li>• Internationally-recognized instrument</li> <li>• Voluntary for private sponsors, so doesn't face opposition from them</li> </ul>	<ul style="list-style-type: none"> <li>• Can cover only a fraction of O&amp;M expenses, so can serve only as a supplemental source</li> <li>• Has a narrow base, as it mainly attracts sponsors only to high-profile, high-visibility facilities</li> <li>• Can be culturally and legally sensitive and lead to public and legal opposition<sup>7</sup></li> <li>• Can be controversial if a sponsoring company has a tainted reputation</li> <li>• When not openly procured, may lead to sub-optimal p</li> </ul>
<p><b><i>Key pre-requisites and implementation requirements:</i></b></p> <ul style="list-style-type: none"> <li>• A clear local policy on naming rights, formulated and approved by an appropriate body (e.g., the Board of Directors of authority that operated the property or a local elected council, etc.)</li> <li>• Proper earmarking of naming revenues for O&amp;M of the facility / system</li> </ul>	
<p><b><i>Geographic coverage:</i></b></p> <p>Monetizing naming rights for sports facilities alone is practiced in at least 38 countries, from Australia to China to Finland to the UK, the US, Brazil and Mexico;<sup>8</sup> the breadth of naming rights for other types of facilities is not known, but is likely in a similar number of countries.</p>	

<sup>7</sup> At least, in the case of naming public schools in the US (Blocher, 2007)

<sup>8</sup> [https://en.wikipedia.org/wiki/List\\_of\\_sponsored\\_sports\\_venues](https://en.wikipedia.org/wiki/List_of_sponsored_sports_venues)

***Typical usage:***

- Mainly for reducing deficits for O&M expenses; sometimes for co-funding capital expenses

## 6. Intensification of land uses on public-use land

This instrument is deployed by all levels of government in a growing number of countries. However, it is often still utilized on an ad hoc basis, rather than as a part of a consistent and systematically-implemented policy. Moreover, it still far underutilized in many cities and countries. As a matter of explicit policy, the biggest challenge it requires is often the departure from the historic status quo. For example, a town of 60,000 may own and maintain eight soccer fields that it inherited from the times of the centrally planned economy. Or a ministry may have long held a gated garden around its building, accessible to staff only. Changing space consumption norms, be they formal or customary, can be politically difficult. From the authors’ observations, such change often happens de facto, without public debate and without any public benefits. For example, school grounds might be dramatically reduced in order to create sites for private commercial development, yet there are no auctions or other private payments made for these newly formed sites that would benefit public budgets (World Bank, 2015).

<b><i>Intensification of Land Uses on Public-use Land</i></b>	
<p>Such intensification can take four main forms: (i) reduction of floor space per employee and reduction of land sites for government buildings; (ii) similar reductions of floor- and land consumption standards for public services (e.g., schools, sport facilities, etc.); (iii) combining several public uses on a land site; (iv) using a public facility or land site jointly with the private sector (e.g., renting a school sport hall for evening sessions of private sport clubs); and (v) relocation of government agencies from prime to more modest locations. Vacated space / land can be sold to the private sector</p>	
<b><i>Arguments for</i></b>	<b><i>Arguments against</i></b>
<ul style="list-style-type: none"> <li>• Results in measurable budget savings on O&amp;M of existing government-use and public-use facilities/grounds and on capital expenses for new facilities</li> <li>• Combining public services within the same property produces operating savings, when services are compatible (e.g., fire station and medical emergency service)</li> <li>• If surplus property is sold, revenues can be very substantial</li> <li>• Directly contributes to local economic development by releasing vacant/underused space and land for economic activities</li> <li>• When impacts public service employees only, doesn’t face opposition</li> </ul>	<ul style="list-style-type: none"> <li>• Cost of implementation can be substantial (e.g., relocation of institutions and their employees, reconstruction of existing government / public buildings, etc.)</li> <li>• Reducing public service facility consumption (e.g., closing public sport facilities) can be publicly unpopular and requires a serious public relations campaign</li> <li>• Disposition of surplus properties can take longer than planned, as it depends on market cycle and market absorption capacity</li> <li>•</li> </ul>
<p><b><i>Key pre-requisites and implementation requirements:</i></b></p>	

- For systematic utilization of this tool, an explicit policy and plan are required
- If reduction of public service consumption is envisioned, serious public communication campaign is needed
- Incentives to entities or communities involved can help overcome opposition or lack of enthusiasm for implementation

***Geographic coverage:***

Includes, but not limited to, the central governments of Australia, Canada, New Zealand, the UK (the most aggressive examples), and the US. Also used sporadically by local governments in China, Canada, and the US

***Typical usage:*** operating expense reductions for government entities; increases in capital revenues from property sales

Examples:

1. The UK: Monitoring, benchmarking, and reducing office space consumption by central government entities. In 2008, the UK introduced an innovative flexible office program, “Working beyond walls,” in order to transform government workplaces through uses of non-territorial space and desk-sharing (Hardy et al., 2008), which later became a common practice in governments internationally. Accomplishments include:
  - Space per person decreased from 13 m<sup>2</sup> per full time employee (FTE) in 2011/12 to 9.9 m<sup>2</sup> / FTE in 2016/17.
  - Vacancy rate within central government properties fell 40% in five years (from 2012-2017) and in 2017 constituted only 1.5% of the floor space - significantly below the private sector rate.
  - The size of the government property portfolio was reduced by 22% from 2010 to 2014/15 (HM Government, 2015).
  - The relocation of government agencies from prime to more modest locations: in central London, the number of government buildings fell from 126 to 63 between 2012 and 2016 (NAO, 2017), with expected further reduction to around 20 buildings by 2025.
2. The City of Hague (the Netherlands): multiple public and private uses of a single building. The building in the photo (below) houses four different services: (i) Public administration for the Segbroek district; (ii) a public library; (iii) a police station with its own parking, and (iv) a supermarket with parking.



*Source:* Tobias Wolfgram, Portfolio Manager, The City of The Hague

#### 4. Gains from regulating land uses and land use parameters on private and municipal land

In addition to capturing value from the land they own, a second way governments can capture public benefits from land value is through their power to regulate land use, both of public land as well as private. All LVC instruments in this group leverage the municipal authority to regulate and change land uses and land-use parameters, i.e. zoning. These LVC instruments include: Sales of development rights or density bonuses; Conversion fee; and Land readjustment.

#### 7. Sale of development rights / density bonuses

Sales of development rights and density bonuses are instruments that are often considered separately, but we group them together due to a core commonality: both capitalize on the ability of local governments to make exceptions to zoning density limits. The table below explains them in greater detail.

<i>Sale of development rights / density bonuses</i>	
<p>A municipality allows a developer or a property owner to exceed the base density typically permitted by zoning rules and go up to a maximum density that the municipality determines the area can support (e.g., exceed the base Floor-to-Area ratio or other parameters). The municipality grants this allowance in exchange for a payment or in-kind contribution, such as funding and building a public-use facility on the site (e.g., a theatre, playground, or other public space). Applies to urban areas that are designated to be receivers of such extra density allowances (e.g., a corridor along a metro line or a major street - or an entire city).</p> <ul style="list-style-type: none"> <li>• The concept behind this instrument is that by increasing permitted density, the government increases the market value of the said land and therefore is entitled to a share of this increase.</li> <li>• Such transactions can be individual, based upon a developer / property owner’s request. However, for large-scale infrastructure projects, the government can auction development rights certificates that buyers may use in pre-defined areas (see the example of Sao Paolo, below).</li> <li>• The payment amount is a function of the extra floor space permitted, defined in most cases by a formula, but also sometimes at auctions or through negotiations.</li> <li>• Municipalities may also issue development rights certificates as a form of payment to property owners for taking their land for public purposes, such as widening streets or historic or environmental preservation; the owners may then use or sell their certificates for other sites.</li> <li>• In some countries private property owners may sell to other owners any ‘leftover’ permitted density they do not utilize on their sites.</li> </ul>	
<i>Arguments for</i>	<i>Arguments against</i>
<ul style="list-style-type: none"> <li>• Mobilizes resources for public capital investment or obtains public-use facilities or amenities without public spending (and often without using public land)</li> </ul>	<ul style="list-style-type: none"> <li>• Is criticized by property owners, developers, and experts when they believe that government holds the base density artificially low, in order to extract</li> </ul>



<ul style="list-style-type: none"> <li>• Revenues can be very substantial as international experiences demonstrate (see examples below)</li> <li>• Voluntary for private sector developers / property owners, so in most cases doesn't face strong opposition</li> </ul>	<p>payments from the private sector for exceeding the base</p> <ul style="list-style-type: none"> <li>• One-time revenue, not stable or predictable</li> <li>• Can work only in areas of vibrant real estate markets with demand for higher density</li> <li>• Complex administrative requirements (see key pre-requisites)</li> <li>• High cost of administrating the system</li> <li>• Non-transparent procedures of approval prone to political influence and corruption</li> </ul>
<p><b><i>Key pre-requisites and implementation requirements:</i></b></p> <ul style="list-style-type: none"> <li>• Policy and implementation regulations that allow sales of development rights / density bonuses</li> <li>• Current, relevant master plan and zoning that allows sales of development rights, based on analysis of real estate market and potential demand for extra density</li> <li>• Administrative policies and procedures must be in place, including: detailed formula for building rights assessment; approval processes; defined methods of payment; how revenues must be used (usually by the establishment of a special fund); oversight system for processes and funds</li> <li>• Advanced capacity among urban planners and administrators to handle these requirements</li> </ul>	
<p><b><i>Geographic coverage:</i></b></p> <ul style="list-style-type: none"> <li>• Used in large cities in many OECD countries, in Singapore, and some cities in Brazil (e.g. Rio de Janeiro, Curitiba, Sao Paolo, Porto Alegre, Salvador, etc.)</li> <li>• Very limited success in some countries (e.g., Colombia).</li> </ul> <p><b><i>Typical usage:</i></b></p> <ul style="list-style-type: none"> <li>• Fund or recover the cost of a particular infrastructure system (e.g., a metro line);</li> <li>• Obtain a public space (e.g. privately owned public spaces (POPS)) or facility without public spending</li> </ul>	

Examples:

1. The City of Sao Paulo (Brazil): Certificates of Additional Construction Potential (CEPACS)<sup>9</sup>

The city issues and sells CEPACS through electronic auctions on the stock exchange.

2. Bethesda (Maryland, US): Sales of density bonus

Montgomery County granted the Chevy Chase Bank the right to build a two-tower building (instead of one tower permitted by base zoning), in exchange for the Chevy Chase Bank constructing a public theater on its own land site.



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<sup>9</sup> Source: Sardoni P. (2010). A New Financial Instrument of Value Capture in Sao Paulo: Certificates of Additional Construction Potential. – in Ingram, G.K. and Hong Y-H. (Editors), (2008): Municipal Revenues and Land Policies. - Lincoln Institute of Land Policy, Cambridge, USA

## 8. Land conversion fee

<i>Conversion fee</i>	
<p>Applies when authorities allow landowners to develop land that was previously classified as non-developable (e.g., agricultural land or land located outside urban development boundaries). Such conversion can take place on a case-by-case basis, upon owner’s application, or can apply to an entire area, for example when a previously rural area is included in urban development plans. In the latter case, a fee is charged only when owners exercise their right to develop land. The concept behind this instrument is similar to that for the sales of development rights: by changing the land’s classification to developable, the government increases the market value of the land and therefore is entitled to a share of this increased value.</p>	
<i>Arguments for</i>	<i>Arguments against</i>
<ul style="list-style-type: none"> <li>• Mobilizes resources for public costs of new development</li> <li>• Can be easily administrated</li> </ul>	<ul style="list-style-type: none"> <li>• One-time revenue, not stable or predictable</li> <li>• Can work only in areas of active urbanization</li> </ul>
<p><b><i>Key pre-requisites and implementation requirements:</i></b></p> <ul style="list-style-type: none"> <li>• Policy and implementation regulation that introduces the conversion fee and specifies details</li> <li>• Administrative procedure that automates approvals and excludes discretion by government officials</li> <li>• Capacity among urban planners and administrators to define areas where the fee is applied</li> </ul>	
<p><b><i>Geographic coverage:</i></b> The full scope of international use is not clear; broadly used in India, Indonesia, and the US; a version of it used in Bogota (Colombia). Was abolished in Denmark.</p> <p><b><i>Typical usage:</i></b> Recover the cost of rezoning and part of the cost of publicly-provided infrastructure</p>	

Examples:

### Taxing land value increment in Bogota, Colombia

Capital gain sharing (participación en plusvalias) was legislated in 1997. For introducing this land value increment tax local governments are obliged to approve their land use plan together with a value sharing instrument as the major source of development financing. It aims to tax the land converted from agricultural to urban land or when urban land-use (density) regulations are changed. The law requires 30%-50% of the land value increase to be captured in this tax. The collected revenues might be earmarked for specific projects, such as road building, public transportation, social housing, urban renewal, cultural heritage maintenance programs. Land value increment tax had produced annually only 0.35% of municipal own-source revenues during the period of 2004-2009. *Sources:* Walters, 2016

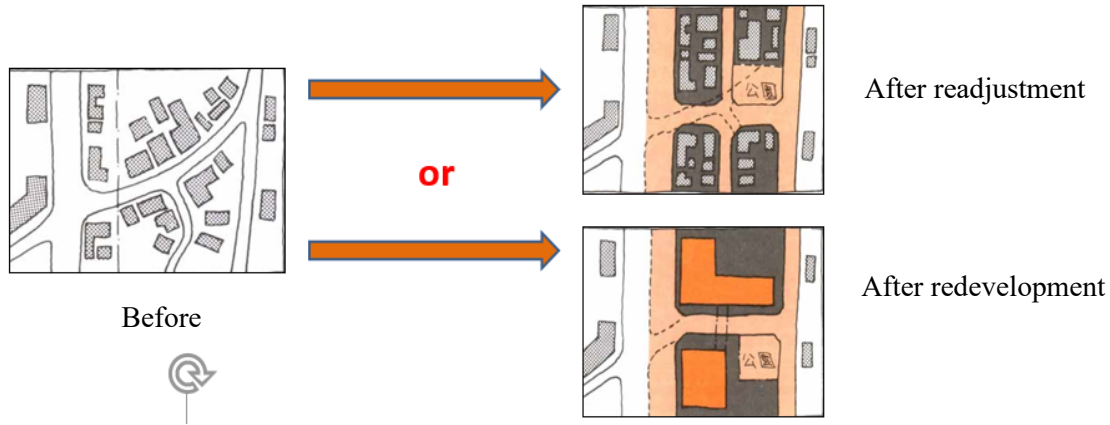
## 9. Land readjustment

<b><i>Land readjustment / land redevelopment (LR)</i></b>	
<p>Land readjustment is a process whereby government re-parcels privately-owned land sites in a pre-defined area; carves out spaces for public use (e.g., streets, etc.); provides infrastructure; reserves some sites for auctioning in order to pay for infrastructure; and returns smaller but more valuable plots to previous owners. The main purpose of LR is to make land suitable for urban development / redevelopment (e.g., redevelopment after major disasters when most properties are destroyed). But it also has an LVC effect because it generates public revenues and/or benefits.</p> <p>Land redevelopment is a version used in high-density urban areas that redevelops the area into high-rise buildings, so former landowners obtain units (e.g. apartments or commercial units) in such buildings, not land sites.</p>	
<b><i>Arguments for</i></b>	<b><i>Arguments against</i></b>
<ul style="list-style-type: none"> <li>• Converts the area into developable land with planned streets, public spaces, and infrastructure.</li> <li>• Can be self-sufficient (or almost self-sufficient) financially</li> <li>• Useful for redevelopment of slums and areas destroyed by natural disasters or wars</li> </ul>	<ul style="list-style-type: none"> <li>• Very complex and expensive to prepare</li> <li>• Not always feasible to re-accommodate all original owners after re-parcellation or redevelopment, so may require buying out some of them</li> <li>• Often faces strong opposition from property owners (the UK and US)</li> </ul>
<p><b><i>Key pre-requisites and implementation requirements:</i></b></p> <ul style="list-style-type: none"> <li>• A special law that allows re-parcellation, including forcing opposing landowners into participation (if the majority is not ready to participate voluntary)</li> <li>• Ability of urban planners to plan land uses that the real estate market will support, in order to make LR financially viable</li> <li>• Qualified staff in government to implement the process</li> </ul>	
<p><b><i>Geographic coverage:</i></b></p> <ul style="list-style-type: none"> <li>• Has been very broadly used in Japan since early 20 century and also in Germany. Used in India, Ethiopia (on a pilot basis).</li> </ul> <p><b><i>Typical usage:</i></b></p> <ul style="list-style-type: none"> <li>• For making land developable, often with substantially higher density</li> <li>• For defraying at least part of the costs of new infrastructure in re-parceled areas</li> <li>• Adding new public infrastructure and public spaces</li> </ul>	

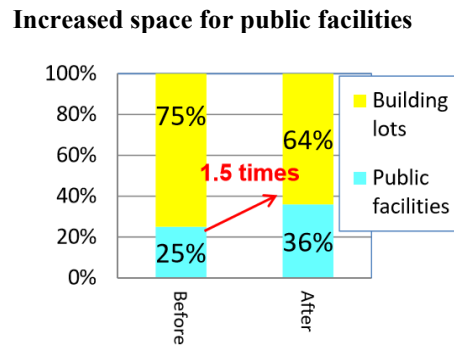
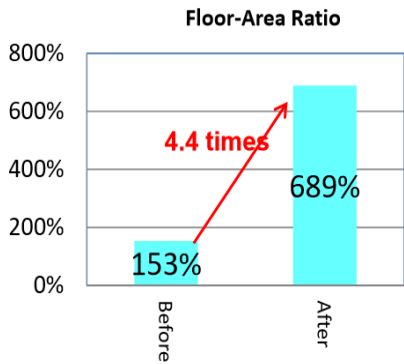
Example:

Japan: Illustrations of land readjustment and redevelopment

The total number of areas where transformation through readjustment or redevelopment was completed from 1969–2017 is 917.



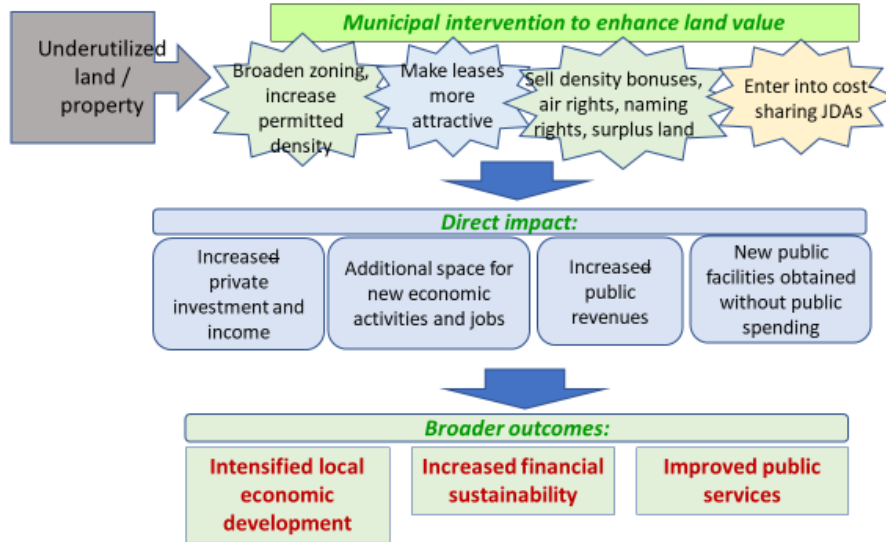
Some results of redevelopment projects in Japan:



Source: Outline of Urban Development Project in Japan – WB TDD, November 2018

In summary, critical to the success of the LVC instruments that stem from government land as well as its powers of regulation is that local governments are in position to increase public benefits by enhancing land value (both publicly and privately owned) *before* proceeding to capturing the benefits, as Chart 1 schematically depicts. It demonstrates how deployment of these instruments, coupled with value enhancement (if properly executed) can have positive impacts along several lines: increasing private investment, with all the associated benefits to the economy; making more space available for local economic activities and jobs; increased OSR; and obtaining some public facilities with reduced public expenditures. The broader implications include not only intensified local economic development, but also better public services and more sustainable municipal finance through a diversified revenue sources.

**Chart 1: The Role of Local Government in Extracting Public Benefits from Underused Land through LVC Instruments**



**5. Fiscal Instruments**

In addition to the LVC instruments that come from the government’s ownership and regulation of land as outlined in Section 3 and 4, respectively, there are various fiscal instruments that governments can use to collect a share of private property values (as well as increases in these values). Similar to the most of previously discussed land control and regulatory mechanisms, these fiscal LVC instruments aim to fund municipal investments and current expenditures.

*a. Recurring fiscal instruments*

**10. Local property tax**

At the local level, the *recurrent property tax* dominates the property related revenues. It is levied on land and buildings and paid primarily by the owners (and sometimes the users) of the real estate.

As summarized below, local property taxation has numerous advantages that outweigh the arguments against it. The property tax is generally accepted because it meets the most important principle of taxation, that is, the payment is comparable to the services (benefits) received. It is typically levied on property users in exchange for essential municipal services and because the visible impact of the tax, it creates higher awareness of these services and increases local accountability. However, there are different practices surrounding local taxation, and a property tax is more accepted in countries where it has been part of the local public finance system for a long period of time. Nevertheless, over the past 30 years it also has been implemented in almost all European countries with previously centrally planned economies.

<i>Recurrent local property tax</i>	
A property tax is levied on land, building or other structures that are easily identifiable, stable and whose values are relatively indifferent to economic fluctuations. Its base is measured either by the property’s value or area (as a proxy for value). A property is a visible taxable object, so revenue administration can be effectively organized. Property tax administration requires proper ownership rules and property registries.	
<i>Arguments for</i>	<i>Arguments against</i>

<ul style="list-style-type: none"> <li>• Tax paid is comparable to services (benefits) received</li> <li>• Usually pays for core local public services, in addition to user charges</li> <li>• May influence business location decisions, attracting companies to municipalities with lower tax rate or other tax allowances</li> <li>• Tax visibility increases taxpayer awareness and government accountability</li> <li>• Ultimate tax burden is on the owner or the property user/occupant who benefits from the services funded by the tax</li> <li>• May encourage productive land use by putting pressure on owners of vacant land and under-utilized real estate</li> <li>• Tax objects are identifiable</li> <li>• Broad tax base</li> <li>• Value-based real estate tax captures some share of property value increase over time</li> <li>• Stable revenue source during normal economic environments</li> </ul>	<ul style="list-style-type: none"> <li>• Local taxation tradition may complicate introduction of property tax</li> <li>• It has political risks because of (i) taxing residential property built from already taxed personal income and (ii) holders of valuable properties opposing value-based property tax</li> <li>• Requires initial investment in property cadaster</li> <li>• Relatively costly tax administration (assessments), especially at the start</li> <li>• Risk of taxing businesses (non-voters) at higher rates than individuals (residents/citizens)</li> <li>• Delayed response to economic changes</li> <li>• Area-based property tax with flat rate is regressive</li> </ul>
<p><b>Key pre-requisites:</b></p> <ul style="list-style-type: none"> <li>• Political will to introduce value-based property tax</li> <li>• Land cadaster with detailed information on properties and owners</li> <li>• Capacity for property assessment (or defining proxies)</li> <li>• Accountable municipal decision-making on rates and exemptions</li> <li>• Tax administration capacity (billing, collection, enforcement)</li> </ul>	
<p><b>Geographical coverage:</b> Used in at least 100 countries, including Canada, the US, 16 countries in Latin America, 33 countries in Europe, 24 countries in Asia, and 25 countries in Africa (Freire and Garzon, 2014).</p> <p><b>Typical usage:</b> general revenue, financing all budget expenditures</p>	

Example 1: Birmingham City: local property tax on residents

Birmingham is a city in the United Kingdom with population of 1,1 million.

The City provides diverse urban, housing, educational and social services with a budget of GBP 3,192 Million (2019). Local government residential property tax (the Council tax) funds 11.5% of the Birmingham City budget (2019/20). In addition, businesses also pay local property tax (the



“Non-domestic” or “Business rate”), which comprises additional 14.1% of the City budget revenues. Council tax is levied on the value of the property. This tax base is defined by eight bands, so the tax on each property in one band pays the same amount. These bands are identical for each local government in the UK and they were defined by law in 1991. There are exemptions when a property is assessed (e.g. for the newly occupied properties). The Council tax to be paid by bands is set annually by the local government. These amounts in percentage of the middle band “D” are by 33% lower in Band A (the buildings with lowest value) and they are two times higher in the upper band.

<b>Residential property tax (Council tax) in Birmingham, UK</b>				
<i>Band</i>	<i>Property value band (min-max), GBP</i>		<i>Council tax by bands (GBP)</i>	<i>Council tax in % of Band D</i>
A	0	40 000	1 106,87	66,7%
B	40 001	52 000	1 291,35	77,8%
C	52 001	68 000	1 475,82	88,9%
D	68 001	88 000	1 660,31	100,0%
E	88 001	120 000	2 029,26	122,2%
F	120 001	160 000	2 398,21	144,4%
G	160 001	320 000	2 767,18	166,7%
H	320 001-		3 320,61	200,0%

The middle “Band D” Council tax is adjusted to the changes in the value of buildings and the needs for funding the city budget (in 1993 it was GBP 657). So the average Council tax per dwelling doubled since then, from GDP 455 (1993) to GBP 989 (2020). For comparison, the average annual gross salary for Birmingham resident was GBP 27,400 (2018). Council tax might be reduced for households with disabled persons; the single member family; there are several exemptions on social basis and support schemes for some taxpayers (pensioners, disabled, etc.). Unoccupied and empty properties are also taxed, after two years doubling the Council tax.

Source: [https://www.birmingham.gov.uk/info/20005/council\\_tax](https://www.birmingham.gov.uk/info/20005/council_tax),  
<https://www.gov.uk/government/collections/council-tax-statistics>

**Example 2. Alternative to property valuation: assessing the tax base for individuals**

<b>Building tax, Romania</b>		
<i>Type of building</i>	<i>Taxable value, RON /m<sup>2</sup></i>	
	<i>With water, drainage, electric and heating installations (cumulative conditions)</i>	<i>Without water, drainage, electricity or heating installations</i>
A. Building with concrete steel frames or with outside walls from burnt bricks or from other	669	397

materials resulted after a thermal and / or chemical treatment.		
B. Building with wood outside walls, from natural stone, from not burnt brick, from cylinders or from other materials not-submitted to a thermal and / or chemical treatment.	182	114
C. Outbuilding with concrete steel frames or with external walls from burnt brick or from any other materials resulted after a thermal and / or chemical treatment.	114	102
D. Outbuilding with wood walls, natural stone, not burnt brick, from cylinder or any other materials not submitted to any thermal and / or chemical treatment.	68	45

**Correction coefficients by locality type and area**

<i>Zone within the locality</i>	<i>Locality set by law</i>					
	0 Bucharest	I	II	III	IV	V
A	2,60	2,50	2,40	2,30	1,10	1,05
B	2,50	2,40	2,30	2,20	1,05	1,00
C	2,40	2,30	2,20	2,10	1,00	0,95
D	2,30	2,20	2,10	2,00	0,95	0,90

Further corrections are made for the building type, age and size.

## 11. Tax increment financing

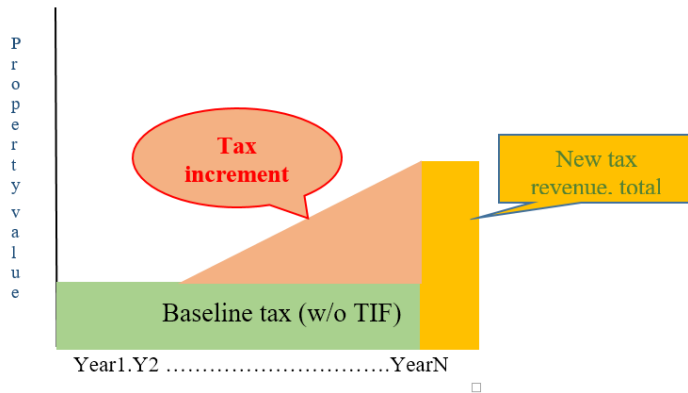
Investment in urban infrastructure requires large funding, although it might serve several generations of taxpayers. These developments are often financed by loans or other debt instruments. A potential source of servicing this debt is the increase in real estate value in the area affected by the public investment. Here the higher tax base will produce more tax revenues, even when the tax rate is kept unchanged. This surtax revenue is collected by the local government in the form of tax increment financing (TIF) mechanism. TIF captures only the new tax revenue, which occurred as a result of the development. It does not put an additional burden on the taxpayer, so the tax rate remains the same. This collected tax amount is earmarked for financing the planned development for a period until the investment is paid. It might be a long period of several decades. TIF is also used for supporting economic development in a designated area.

<b><i>Tax Increment Financing (TIF)</i></b>	
<p>Involves assigning increased property tax revenues collected from what is anticipated of the more valuable tax base to developing a designated area over a long period. Additional tax revenues are due to an increase in the market value of properties (the tax base) and not through higher tax rates. This added value (and thus revenue) originates from both public investments and also through private investment spurred by the public investment.</p>	
<b><i>Arguments for</i></b>	<b><i>Arguments against</i></b>
<ul style="list-style-type: none"> <li>• Stimulates development within a specified area</li> <li>• No need to increase tax rate; an increased tax base produces additional municipal revenues</li> <li>• Credible mechanism: formal government commitment to development of the specific area</li> <li>• Borrowing is secured by the increased property tax revenues paid only by the affected owners (beneficiaries)</li> </ul>	<ul style="list-style-type: none"> <li>• Contingent liability for the municipality</li> <li>• Long and expensive preparatory process</li> <li>• Earmarking makes decisions about spending additional tax revenues less transparent and limits public control</li> <li>• Deviates “natural” increase in tax revenues from the targeted area (i.e. natural value (and tax) appreciation that would have taken place without TIF) so that it benefits primarily target area (vs. all taxpayers in the jurisdiction)</li> <li>• Used for limited period</li> <li>• Creates tax competition between neighboring (or overlapping) jurisdictions</li> </ul>
<p><b><i>Key pre-requisites:</i></b></p> <ul style="list-style-type: none"> <li>• Medium to long-term capital investment plan for the targeted area</li> <li>• Functioning value-based property tax system</li> <li>• Transparency of public financial decisions</li> </ul>	

<ul style="list-style-type: none"> <li>• Borrowing authority and capacity at municipal-level</li> </ul>
<p><b>Geographical coverage:</b> All states in the US (hundreds of TIF districts); UK (Glasgow, Edinburgh); Canada (provinces of Alberta and Ontario)</p> <p><b>Typical usage:</b> funding infrastructure for housing, commercial development; urban rehabilitation; environmental recovery; economic development</p>

TIF examples:

1. Illustration of the TIF concept:



2. BeltLine Tax Allocation District in Atlanta, Georgia

The project aimed to build a new transit system connecting several localities along a transportation corridor of 22 miles following an old railroad circle. The actual construction was implemented through transportation, housing and recreational projects. The program was implemented by a special corporation, which raised the capital partly by issuing bonds. In the first stage 35% of the total project costs of USD 337 Million was funded by tax increment financing.

Source: <https://www.lincolnst.edu/publications/policy-focus-reports/improving-tax-increment-financing-tif-economic-development>

3. Risks of deviating TIF revenues from intended purposes: the case of the city of Chicago, US.

About \$660 million—a third of the city’s property taxes—go into its many TIF districts. In 2009, it was discovered that some TIF money was used to revamp skyscrapers and provide subsidies to large corporations in deals made behind closed doors. In 2017, an investigation by *Crain’s Chicago Business* and the Better Government Association found that \$55 million in TIF dollars, which were intended to fight blight, were spent to renovate Navy Pier, a glitzy waterfront tourist attraction (Misra 2018).

**b. Other property related revenues**

The recurrent tax on real property typically dominates governmental property-related revenues. But there are other *one-time duties and levies on property* that are also used to capture a part of the private benefits that originate from public real estate activities.

**12. Betterment charge**

Betterment charge is an example of direct land value capturing: it aims to collect a portion of the financial gains, in the form a one-time charge, from the property owners who benefitted from a public investment. However, there are several practical obstacles which hinder a wide use of this conceptually straightforward LVC mechanism. Even when the betterment charge intends to collect only a part of the property value increment, the administrative burden prevented local governments from the broader use of this technique.

<b><i>Betterment charge</i></b>	
<p>One-time charge that collects a share of the increase in property value resulting from new public infrastructure (e.g., a metro line built within walking distance of a residential property). Usually, governments try to collect 30-50% of the increase in value.</p>	
<b><i>Arguments for</i></b>	<b><i>Arguments against</i></b>
<ul style="list-style-type: none"> <li>• A direct way to recover some part of public investment in infrastructure</li> <li>• Charges beneficiaries and not the whole population</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult or impossible to identify which part of an increased value should be attributed to the public infrastructure and which to other factors (e.g., overall inflation of real estate values / prices)</li> <li>• Commonly challenged in court</li> <li>• Difficulty to define a border between area that benefits and does not benefit from the infrastructure</li> <li>• Enormously high cost of administering compared with the revenue collected</li> </ul>
<p><b><i>Key pre-requisites and implementation requirements:</i></b></p> <ul style="list-style-type: none"> <li>○ Fully implemented, local value-based property tax (as a basis for monitoring increases in property values)</li> <li>○ Credible and fair methodology to identify which share of the value increase comes from the added infrastructure</li> </ul>	
<p><b><i>Geographic coverage:</i></b></p> <p>Very limited use: Spain, Israel, a few cities in Latin America; was canceled in the UK and Australia; no success in Poland</p>	

*Typical usage:*

Recover a part of infrastructure costs that resulted in increased property values

Examples:

Betterment levies were widely attempted for use as LVC instruments in Latin-America (Smolka, 2013; Walters, 2016). Since the 1980s, the national legislation in several countries authorized local governments to charge a one-time payment on the property owners who benefited from building municipal roads or other local infrastructure. It was reported, that more than half of the main road network in Medellin (Colombia) was funded by betterment charges. To date, the importance of this instrument declined, because of the administrative difficulties to levy and collect this charge.

### 13. Special Assessment Districts

Similarly, to the betterment charge, local governments aim to re-coup infrastructure costs through additional recurrent fee over a longer time period. This fee is usually added as a surtax to the property tax in a designated area. An amount of this surtax is not related to property value, and is charged until the cost of the specific infrastructure is recovered.

<b><i>Special Assessment District (SAD)</i></b>	
<p>A designated area where local government charges property owners a special assessment, on a periodic basis, in order to recover the cost of specific relevant infrastructure investments. SAD can be initiated by the municipality or by the property owners in the area affected by the infrastructure improvement. The targeted improvements are typically one type of infrastructure service, such as a water or sewer system, public lighting, etc. The costs of these improvements are allocated to the owners of various property types (i.e., residential, commercial, industrial) in accordance to who benefits and to what degree. In other words, a SAD charge is intended to be proportional to the benefits received. The full improvement costs can be divided between the SAD and the municipality.</p> <p>The actual payments are made through surcharges added to the property tax. The capital investment costs are paid for upfront by the municipal budget.</p>	
<b><i>Arguments for</i></b>	<b><i>Arguments against</i></b>
<ul style="list-style-type: none"> <li>• Owners in the designated area pay for the benefit received (localized benefits and costs)</li> <li>• Incentives for private land development within the district</li> <li>• Additional revenue (surcharge) has limited extra administrative burden</li> <li>• Reliable, predictable revenue source</li> </ul>	<ul style="list-style-type: none"> <li>• Costly and time consuming preparations (feasibility study, communication, legal advice, administration)</li> <li>• Higher than general obligation borrowing costs for municipalities, because of the higher repayment risks</li> <li>• Unequal tax treatment of property owners within and outside the special district: the former pays the SAD surcharge, the latter does not</li> </ul>
<p><b><i>Key pre-requisites:</i></b></p> <ul style="list-style-type: none"> <li>• Property cadaster with detailed information on the properties and owners' medium to long term capital investment plan for the targeted area</li> <li>• Capacity to raise infrastructure funding or financing upfront</li> <li>• Established and functioning property tax system</li> <li>• Revenue administration capacity (collection)</li> </ul>	
<p><b><i>Geographical coverage:</i></b> municipalities in the USA; Milan, Italy</p> <p><b><i>Typical usage:</i></b> recovering cost of local infrastructure (e.g. water, etc.) or transit-oriented developments (e.g. metro line)</p>	

Example:

Special Assessment District at Tysons Corner, Washington, DC metropolitan area, US

Tysons Corner is a large shopping and business center in a rapidly growing county in the state of Virginia, located between the capital city and its major international airport. To solve a congestion problem that threatened the center's future, the county, the state and the Federal government established the Dulles Corridor Rail Association (DCRA) to extend the existing Metrorail line to the area. DRCA, together with the owners of the center, created a Special Assessment District.

Estimated costs of the project's Phase 1 were \$2.9 billion, out of which the SAD was to finance \$400 million. (The rest was to be funded by local toll revenues and government (state, federal) grants.)

The SAD was established by state legislation with the majority support of property owners, and the process was initiated by the DCRA and the land owners association. The local government authorized the SAD, appointed a supervisory commission, and proposed an additional annual 0.22% property tax on commercial and industrial properties. The County issued bonds secured by the anticipated future tax revenues, followed by the second issue. The construction of Phase 1 was completed on time between 2005-2014.

*Source:* Santos et al., 2017





## 14. Real estate capital gains tax

The real estate capital gains tax targets the property value changes caused by factors that influence real estate prices. These may be external factors (e.g., economic development, public service improvement) or other localized factors (e.g., changing urban regulations). This tax is levied at the time of sale on a property seller and usually collected by the national governments as an income tax.

<b><i>Real estate capital gains tax</i></b>	
Tax levied on the increase in property value between its acquisition (construction or purchase) and its sale. It is paid by seller. There are country specific exemptions (e.g. primary residences) or deductions from the tax base (e.g. capital expenses made during the seller's ownership in the US). A sub-category of this tax is the land value increment tax, for cases where a property tax is split into land and improvements components.	
<b><i>Arguments for:</i></b>	<b><i>Arguments against:</i></b>
<ul style="list-style-type: none"> <li>• Captures the share of a property value increase for public purposes</li> <li>• In principle, may limit property speculation (actions based on expectations of price increase caused by external factors)</li> <li>• Constant, though fluctuating, source of revenues</li> <li>• Fair financial burden on beneficiaries of an unearned value increase</li> </ul>	<ul style="list-style-type: none"> <li>• Popular opposition, political risk</li> <li>• Unstable revenue source, as it substantially depends on market activity and price dynamics</li> <li>• Risk of underreported prices or informal transactions</li> </ul>
<b><i>Geographical coverage:</i></b> Argentina, Australia, Austria, Belgium, Brazil, Canada, Denmark, France, Finland, Ireland, Mexico, Norway, Spain, Sweden, UK, Uruguay, USA,	
<b><i>Typical usage:</i></b> national (and state) budget revenues	

Examples:

### *Capital gains tax rates in Europe*

Capital gains taxes are widely used on all continents. It is usually levied on the sale of real estate, which was held for a short period. It is part of the national income taxation, so the rates of capital gains tax on real estate hugely vary: in Europe, from 1.6% in The Netherlands to 34% in Finland; in Asia there are countries without capital gains tax (e.g. Singapore), while it is 42% in South Korea. In the US capital gains tax is 15%, while in Canada 33%. (Source:

<https://www.globalpropertyguide.com/>)

## 15. Real estate transfer tax

This tax or duty is levied on sales of immovable property, including land (along with other transactions, such as inheritance or gifts – though the types of transfers subject to it may vary by country). This tax is intended to cover transaction-associated government costs, such as registration, operation and maintenance of property cadasters, or issuance of title deeds. Given that some transaction-related administrative services are usually provided by the higher levels of government, the transaction tax is typically a shared tax, with most revenues going to national governments. Internationally, this tax rate varies between 0.1% and 15% percent of the sale price (or current property market value)<sup>10</sup> and may vary even within one country (e.g. 0.1% - 4% in the US). Defining the rate can be a challenge, because the government might expect that setting it high would limit speculation (i.e. frequent re-sales); at the same time, if rates are too high, sellers start systematically underreport sale prices.

<b><i>Real estate transfer tax</i></b>	
Duty paid when property is sold or goes through some other transfer (inheritance, gift); its amount is defined as some percentage of the price/value. Who pays – seller or buyer or both – may vary and may be part of the sale agreement between parties in a specific real estate transaction. It aims to compensate government costs associated with real estate transactions, such as registration, operation and maintenance of property cadasters, or issuance of title deeds. Tax exemptions are sometimes granted to support special objectives, such as enterprise zones or welfare purposes.	
<b><i>Arguments for</i></b>	<b><i>Arguments against</i></b>
<ul style="list-style-type: none"> <li>• Tax administration is relatively effective, because a transfer event (though not necessarily the value) is visible</li> <li>• A stable revenue source (under normal economic circumstances)</li> </ul>	<ul style="list-style-type: none"> <li>• One-time revenue</li> <li>• May discourage formal sale transactions and encourage fake substitutes (e.g., gifts)</li> <li>• Risk of systematic underreporting of transaction prices if tax rates are too high</li> <li>• Revenues fluctuate with economic cycle</li> <li>• Discourages mobility by taxing more frequent movers</li> </ul>
<b><i>Key pre-requisites:</i></b>	
<ul style="list-style-type: none"> <li>• Reliable property transaction officiating and recording system</li> </ul>	
<b><i>Geographical coverage:</i></b> the majority of European Union countries, Canada Singapore, Russia, Turkey, the USA;	
<b><i>Typical usage:</i></b> general revenues, budget expenditures; national or shared taxes	

Example:

<b>Property registration tax in selected European countries</b>
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<sup>10</sup> Interpretation of these rates must be made in the context of a specific country, because a high property transfer tax rate may be associated with the fact that a recurrent property tax doesn't exist.

Land Value Capture: Guidance for Practitioners

Country	Tax base	Tax rate
Belgium	sale of real estate	12.5%
Germany	sales price	3,5%, increased since member states decide
Greece	sales price	12-14% plus municipal share
Spain	immovable property transfer	6-7% regional tax
Italy	market value based	0,5-15% (3% for the first purchase)
Netherlands	market value	2%
France	sales	7.5%
Source: EC, 2012		

## 16. Developer charges and exactions

New public infrastructure investments for new real estate projects can also be partially funded by the private developers and owners who stand to benefit from this infrastructure through *non-recurrent* financing instruments. The most common is the local developer charge (also called an impact fee), which is a one-time contribution; developer exactions are its another form - an in-kind contribution. There are several common challenges related to defining the amounts of these charges (see discussion in chapter 6).

<b><i>Developer charge and exactions</i></b>	
<p>One-time financial or in-kind contribution (e.g., land for public uses, public facilities) to the on-site or off-site development of infrastructure and public services that benefit the property being developed. In new developments, they are made by developers. In case of extensions and new additions to existing buildings, property owners make the contribution. Payments are linked to obtaining development or construction permits. Developer charges and exemptions can be standardized (formula based) or negotiated.</p>	
<b><i>Arguments for</i></b>	<b><i>Arguments again</i></b>
<ul style="list-style-type: none"> <li>• Benefits (access to infrastructure) are identifiable</li> <li>• Costs can be linked to beneficiaries, which helps to gain support</li> <li>• If close-to-full cost of infrastructure is included in these charges, this may help limit urban sprawl</li> <li>• Reduces hidden government subsidies to land development and economic activities</li> <li>• Shared administrative costs, when developer charge is incorporated into the development or construction permit</li> <li>• Collected revenues are supposed to be targeted or formally earmarked to infrastructure investments</li> <li>• Relatively broad payer’s base, especially if building additions are included</li> <li>• Can be adopted locally, without national-level legislation</li> <li>• Can be easily modified as needed, locally, depending on economic conditions</li> </ul>	<ul style="list-style-type: none"> <li>• Base is more limited than for the property tax, because it is imposed on construction only</li> <li>• Disincentive for legal construction, if too high</li> <li>• Risk of potential abuse by municipalities (charging more than the actual infrastructure costs)</li> <li>• Risk of double charges, when in addition to the developer charge / exaction, developers have to pay additional fees of the same nature (e.g. utility connection fee)</li> <li>• One-time revenue</li> <li>• Unstable revenue source, as it depends on overall construction activity</li> <li>• Unfair allocation of burden, because only new users defray the costs, while existing users may also benefit from added infrastructure</li> <li>• Often applied case-by-case and thus open to political bias and favoritism and hence open to legal challenges</li> <li>• Lack of transparency and potential for corruption</li> </ul>
<p><b><i>Key pre-requisites:</i></b></p>	

- Financial management and engineering systems capable of measuring, monitoring, and accounting for infrastructure costs
- Well-trained professionals to negotiate formulas with developers for attributing new infrastructure costs to particular private construction
- Sufficient transparency of charge setting and the negotiation process
- A reasonable level of trust in government

**Geographical coverage:** Argentina (Cordoba), Australia, Brazil (Sao Paulo, Rio de Janeiro), Canada, Croatia, Colombia (Medellin), Finland, France, Germany, Greece, Guatemala, The Netherlands, Poland, Russia, Serbia, Sweden, the UK, the US.

**Typical usage:** funding local infrastructure associated with development

Examples:

1. In the US, a national average of the impact fee (2019) was \$13,627, for a single-family home of \$200,000 value. In California it was \$37,471. This is a standard (non-negotiated) fee charged on new developments to fund capital investments needed for growth. The data from the survey of 270 jurisdictions in the US and includes utility connection fee, fees-in-lieu, and development tax.

Source: <http://www.impactfees.com/>

2. Legal framework for regulating developer charges (based on Walters, 2016):

- a) Definition of development type (residential, industrial project) and scale (small, large)
- b) Projects included: water, transportation, public spaces, education, housing, etc.
- c) Connection between the development and its local effects (on-site impact, boundaries (off-site))
- d) Allocation of costs to project (development): fully of on-site costs; fair share of off-site impact costs
- e) Cost assignment: who and how decides
- f) Developer charge payment method (land, cash, in-kind) and timing
- g) Accounting rules
- h) Allocation of collected charges to the effected jurisdiction

## 6. Role of LVC Instruments in Municipal Finance and Municipal Development

A summary review of the LVC instruments considered in previous chapters is presented in full in Annex 1. These instruments have a wide range of characteristics important from practical viewpoints, namely by:

- a. The type of public benefits they produce: from fiscal (e.g., increased revenues or recouped expenses) to in-kind (e.g., infrastructure) to contributions to local economic development (e.g., more intensive, productive use of urban space); many instruments produce a combination of these benefits;
- b. Who pays: a property owner or tenant or developer;
- c. Whether an instrument is mandatory for private sector actors, (such as taxes) vs. voluntary (such as leases, purchases of municipal land, or participation in JDAs);
- d. How much decision-making power and discretion local governments typically have with each instrument;
- e. How broad the payers' base is: from broad-based (including the property tax, developer charges or real estate transfer tax) to unique or even exotic and site-specific (such as JDAs or air rights);
- f. How wide-ranging the global experiences are of successfully deploying each instrument: from the most tested and used method, the property tax (i.e., in more than 100 countries!) to more limited success of the betterment charge, and finally;
- g. The elements of the critical implementation pre-requisites and requirements for the instrument.

Thus, ranking or even simply comparing different LVC instruments is a daunting task due to the complex, multi-dimensional characteristics of instruments. Furthermore, not all the characteristics or dimensions have even been identified or can be meaningfully measured (e.g., how do you measure a public finance tradition?) and even less can be said about which of the dimensions are more important and which are less so. Nevertheless, when considering the revenue-generating capacity and sustainability of the instruments, two lines of considerations can be particularly useful and are discussed below: namely, how much revenues they produce and how broad the payers' base is.

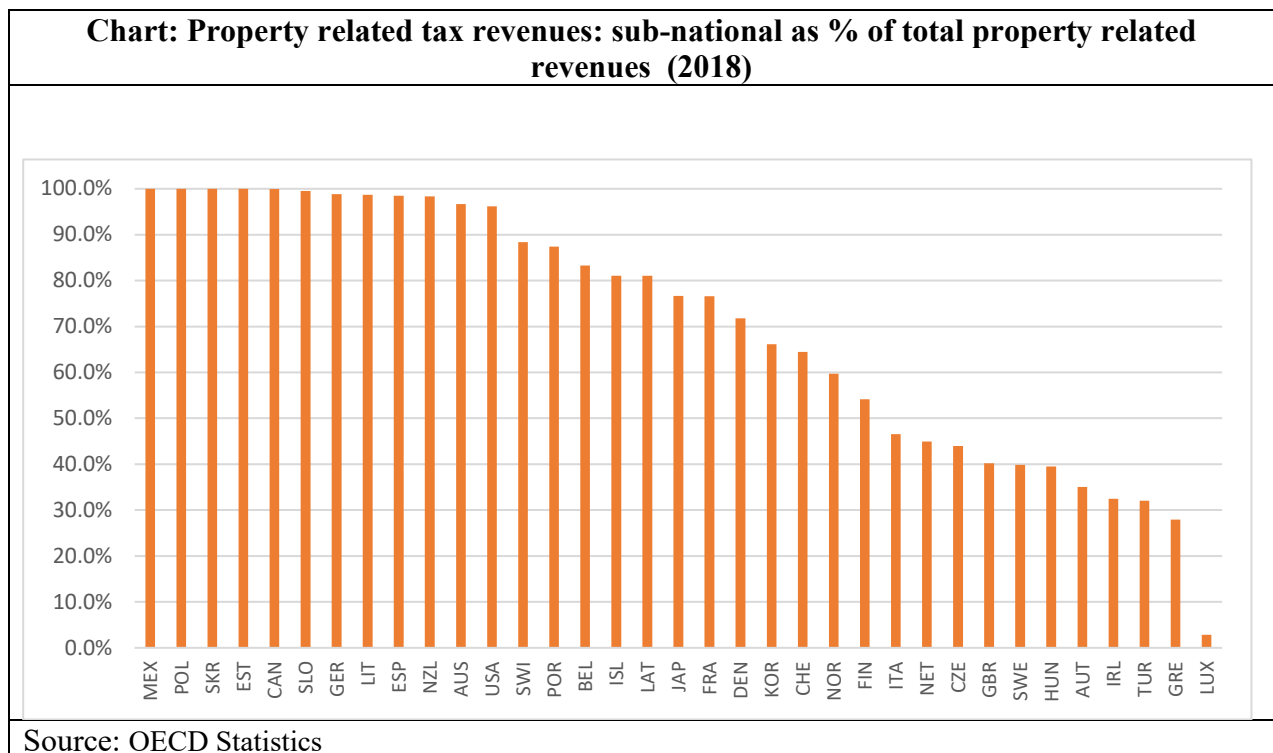
### *a. What are the revenues from LVC instruments?*

When it comes to comparative data on revenues produced by the various LVC instruments, given their diversity and the variations with which instruments are used in different locations (even within one country), there is no national, comparative financial data. The available financial statistics use more aggregate terms, where it is impossible to separate the various types of property-related revenues or even to identify which government tier collects them.

It is known, however, that the largest reported source, namely property-related general government tax revenues collected jointly by all levels of government, comprises 1.9% of GDP (OECD, 2018). However, this bundle of instruments still makes relatively low contributions to funding total public expenditures: the major sources of funding public budgets are income taxes and consumption taxes (typically of the value-added type). Further, among developed countries for which data exists, there

are major differences in the significance of property related tax revenues. There are countries with strong property tax traditions (e.g., the US, Australia, Canada, the UK, Belgium, and France where property related taxes are above 3% of GDP, while many other developed countries rely more on income and consumption taxes.

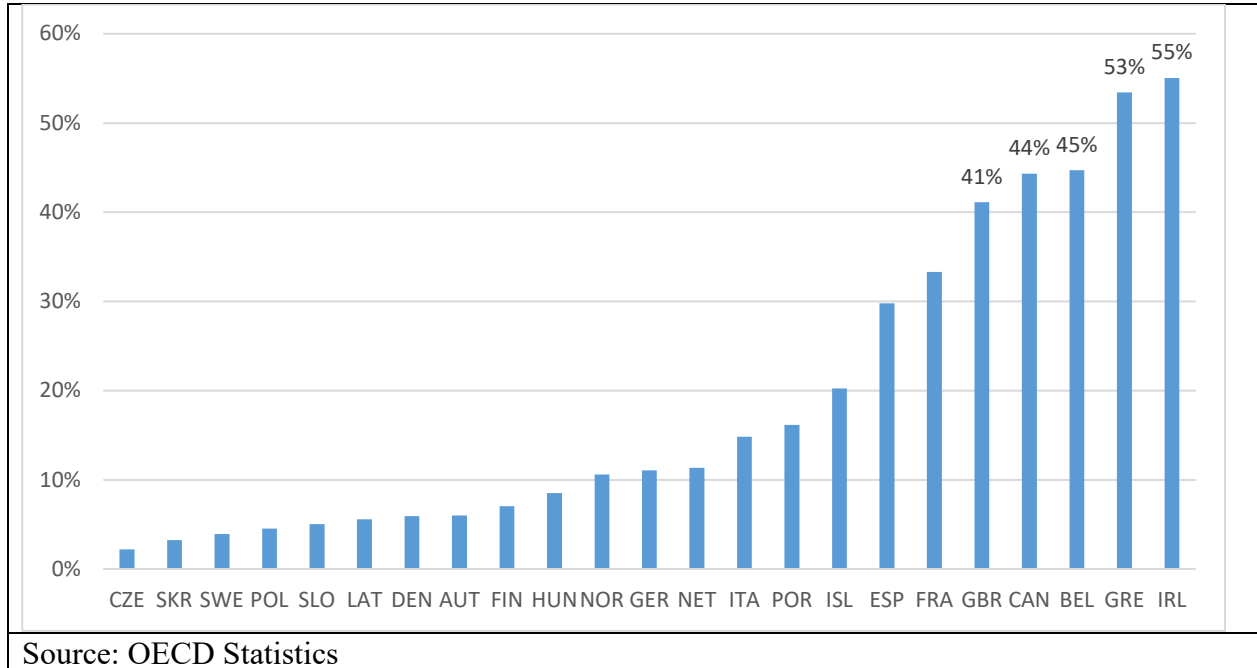
As property is a location-specific revenue source, the majority of property tax revenues are raised by *sub-national governments* (chart below).<sup>11</sup> That means that the majority of the land value capturing instruments discussed below are local, including property tax and financing techniques based on local property taxes (tax increment financing, betterment charges); land leasing; the non-recurrent revenues such as property transfer tax, developer charges and exactions, and funding schemes of special assessment districts. Some are accounted for under different headings (e.g. real estate capital gains tax is reported as an income tax), so they are not part of this group.



Further, property taxes are significant local government revenue sources in some countries (chart below). They fund more than 30% of local budgets in several developed countries: Spain (30%) France (33%), United Kingdom (41%), Canada (44%) and even more in some smaller – and less decentralized - countries (e.g. Greece (53%), Ireland (55%)).

**Chart: Property tax revenues as % of the total local government revenues, 2018**

<sup>11</sup> Sub-national governments are municipalities and the state governments (provinces, regions) in federal countries.



Critical to the discussion and comparison of LVC instruments as revenue sources is the fact that the recurrent tax on immovable property constitutes 94% of all local property-related revenues in the OECD countries (2018). In other words, all other LVC instruments, including land and property leases, developer charges, sales of development rights, etc., together produce only 6% of property-related revenues.

Finally, it is important to remember that some LVC tools also produce in-kind benefits, such as contributing private land to municipal ownership for public use, such as streets or building public facilities. This produces fiscal benefits for local governments, in the form of cost avoidance, but we have not found any data that would allow estimates of the budgetary equivalent of such contributions, even for a single city as a case study.

***b. How broad are the payers’ bases of the LVC instruments?***

As previously mentioned, the local property tax has the broadest base: all non-exempt property owners. This tax has other attributes that contribute to its reputation as good source of municipal revenues; namely, the objects of taxation are immovable and relatively easily identifiable, and they are also relatively indifferent to economic fluctuations.

The second broad-based and relatively easy to administer LVC instrument is developer charges / exactions, whereby payers include jurisdiction-wide applicants for development and building permits.<sup>12</sup> The real estate transfer tax and real estate capital gain tax have a comparable breadth of

<sup>12</sup> There are, however, several common challenges related to defining amounts of these charges. 1. Conceptually it is not clear (and addressed differently in different countries) which exactly infrastructure systems should be funded from this source and which should be covered from general local taxes. 2. Calculating specific costs is a complex technical task that requires certain skills and data to be available to local governments. 3. Attributing the costs to particular development sites is also a complicated task, given that development in each area can take years. For example, if a new



base (real estate sales), but they are mainly shared or central-government revenues, which implies that local governments have a smaller stake in promoting their introduction.

The third group by tax base includes area-specific instruments, such as the conversion fee, Special Assessment Districts (SADs), TIF districts, and betterment charges – all of which are mandatory for property owners within particular area in a jurisdiction. The conversion fee is relatively easy to implement. The complexity of implementing SADs is comparable with that of developer charges. However, two others in this group, TIFs and betterment charges, are incomparably more difficult to implement, because their pre-requisites include a fully operational value-based property tax (and, in the cases of TIF, an established system of municipal borrowing). Therefore, TIFs and betterment charges should be immediately ruled out in many developing countries without these pre-requisites in place.

The narrowest base is typical for voluntary site-specific instruments, such as municipal land leases and sales, JDAs, air rights, naming rights, and sales of development rights / density bonuses. As previously mentioned, these instruments can be invaluable for funding and delivering public infrastructure (urban mass transportation in particular) in high-density cities with particularly vibrant real estate markets, but they are not relevant as mass-use instruments for the majority of cities.

Finally, two instruments stand apart from the rest in terms of their base: intensification of land uses on public-use land and land readjustment. How broadly they can be applied varies. In particular, the fiscal and economic benefits of the intensification instrument clearly depend on the size of government property holdings: the larger such holdings, the greater the benefits of rigorous application of the instrument.

***c. Which level of government is needed to introduce LVC tools?***

The first two groups of instruments (namely, those under the purview of government land and its power to regulate land uses) are generally under the jurisdiction of local governments, which implies that these instruments can be introduced by municipal regulations (exceptions may include complex instruments such as JDAs, which are PPPs in their nature and may require a special law, especially in civil code countries). The revenues and other benefits from the instruments in these two groups are most often locally realized. The third group, fiscal instruments (including taxes, fees, and in-kind contributions) represent a mixture – some of these LVC instruments are local (e.g., developer charges), while others, such as the property tax, require national-level laws, and revenues from them may be shared between levels of government.

The introduction of land value capture mechanisms requires the *active cooperation* of the various municipal administrative units and should be based on *horizontal communication* between

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watermain of a large diameter is placed to serve not only current new developments but future ones as well, what is a fair share of the cost to be imposed on the first developer who needs connection to this watermain? Lack of obvious answers to such challenges or clear public policy results is the fact that in some countries developers are overcharged, systematically or occasionally.

departments, including urban planning, capital investment, financial and service management. At each stage of managing the LVC process, different municipal departments should take the lead. In addition, site-based LVC instruments require flexible decision-making procedures and sharing staff with critical skills and expertise between the various units.

Further, most of the LVC instruments require active cooperation with the property owners or developers / investors, who should be informed and engaged at the early stages of the LVC management process. This is one reason why urban planning should be an *inclusive process*, where development objectives and financing options are discussed from the preparatory stages. Once a particular LVC tool is selected for testing or implementation, the affected residents and businesses should be informed about the levies, revenue collection channels and the service improvements expected as a result.

***d. The role of LVC instruments in municipal sustainability***

LVC instruments can contribute to municipal financial, economic, and spatial sustainability in several ways. First, some instruments (e.g. the property tax) make revenues more stable and sustainable by broadening the number of payers. Secondly, some enhance the economic productivity of land, and channel part of this increased land value into public revenues (or amenities) and private profits (see Chart 1, above). In general, applying different LVC instruments simultaneously diversifies the opportunities for municipalities to benefit from land, be it public or private.

**7. Systemic Pre-requisites and Good Governance for Effective LVC Tools**

The LVC instruments we have discussed can only be successfully introduced and effectively implemented if the proper conditions are in place, which include numerous regulatory, institutional, procedural, financial and administrative requirements. From a practical viewpoint, before full-scale assessment of an instrument's applicability is conducted, the first step should be a careful examination of its prerequisites juxtaposed with the local and national context. Without this step, the instrument cannot be reliably recommended to a government as a potential tool. For example, it would be not reasonable to recommend a betterment charge, which is based on a functioning value-based property tax, in a country without a property tax or TIF in cities that cannot borrow for long term.

A more complex issue is how to distinguish true pre-requisites, as in the simple examples above, from implementation requirements that could possibly be met as a part of instrument's implementation. For example, three fiscal instruments – the property tax, real estate transfer tax, and real estate capital gains tax – depend on the existence of some form of property cadaster or registration system (see Annex 1). Should the cadaster then be treated as a pre-requisite, or as an required element to be developed as part of implementation? Obviously, the answer is both contextual and circumstantial.

In addition, beyond specific pre-requisites and conditions, most of the LVC instruments are dependent on local governments possessing a certain level of autonomy, coupled with effective control and oversight of their policies and procedures. In addition, local governments must have a basic level of understanding of land economics and private sector expectations, which they often

lack. More specifically, in order to successfully execute LVCs, local governments must exhibit the following capabilities:

- a. Sufficient land management rights and responsibilities.

They are needed in order to apply the instruments related to government land and property (i.e., 1st group in Table 1). On the rights side, municipalities must own land (as is the case in most countries in the world) or possess strong land control rights (the case of China or Ethiopia), so that they can lease or sell land to private sector actors or enter into other contractual arrangements with them (e.g. JDAs, air- and naming rights). On the responsibilities side, conditions for prudent use of municipal land for land value capture require the following:

- a. A long-term land use plan for the entire territory of a city, such as a Master Plan;
- b. A complete inventory of municipal land and property;
- c. Clear pricing policy (i.e., when land must be allocated at market prices, when it may go below market (at cost recovery), etc.)
- d. A long-term land management plan for any long-term leasing or sales; ideally done as a part of a conscious balance sheet approach to land asset management (Detter & Folster, 2017; Peterson, 2006);
- e. Earmarking land sale revenues for capital investment or long-term debt repayment; and
- f. Clear policy on what kind of JDAs are allowed (in particular, on whether a municipality may participate in speculative real estate investment projects) (see Annex 1).

**Box 1. Pricing Municipal Land: Good Practice, the Netherlands**

By law, municipal land in the Netherlands should be sold to the private sector at market prices. However, local councils may make exceptions. For example, if the city wants to sell its office building to a developer for conversion into apartments for the elderly, the municipal asset manager must estimate an expected loss of revenues compared with the “highest and best use” of the site and present this estimate to the city council. The estimate must be conducted by an independent, certified property appraiser. The council would decide whether they are ready to take this loss, and if they do, the decision goes on record, and the loss of income is recorded in the accounting system.

In the reality, however, LVC instruments related to government land and property are often used without such prudent rules in place, even in developed countries, but especially in former centrally planned economies. For example, a municipal land site in prime location may be given to a municipal development corporation for free, to build a civic center and subsidized housing, without estimating how much the city would get if it were sold the site for its “highest and best use.”<sup>1</sup> (in other words, without knowing how much revenues are forgone).

In general, use of LVC instruments associated with municipal land often results in large forgone revenues for local budgets, unrealized local economic development, and, in the worst cases, irreversible stripping of municipal assets. Therefore, for this group of LVC instruments, improving governance, including introduction of prudent policies, would be highly relevant.

It is important to emphasize that good governance and its enforcement for this group of LVC instruments should come from the upper levels of government, as the Dutch example (Box 1) and others demonstrate.

***b. Governments must be makers (not breakers) of land value***

Almost all instruments based on municipal land ownership or regulatory powers (i.e., groups 1 and 2, Table 1) imply participation of private sector partners, such as lessees, buyers, JDA partners, etc. The private sector expects financially viable projects and competitive profits when considering working with municipalities. Moreover, the higher the expected market value of land, the higher the revenue or in-kind contribution that municipalities will obtain via LVC instruments, as Box 2 illustrates. In this regard, municipalities and their private partners should both be interested in maximizing the economic productivity of land and hence its market value.

It is surprising, therefore, how pervasive are excessive property use and occupancy limitations imposed by urban planners or managers of public land in many countries, given that this undermines both public and private gains from land. Such practices are especially wide-spread in former centrally planned economies. Typical over-regulations include:

- a. Unjustified prescriptions or limitations on permitted land uses in zoning plans (e.g., plots in an industrial zone may have specific uses assigned to them (e.g., “soft drink production,” “car repair shop”, etc.)), and
- b. The excessive number of density and land envelopment parameters, which often conflict one with another (e.g., regarding plot site, number of housing units per plot /area, size of housing units, floor-to-area ratio, plot coverage, percent of greenery, setbacks, number of floors, height, etc.).

Such planning limitations can be exacerbated by unattractive contract conditions (e.g., insufficient duration of land leases; prohibitions on sub-leasing), lack of flexibility on the municipal side, and questionable procurement processes.

**Box 2. How Urban Planners Can “Make or Break” Land Value: A Case Study from Serbia**

An undeveloped site of 10 hectares on the outskirts of the 3<sup>rd</sup> largest city in the country was zoned as industrial. Two scenarios below present permitted land uses suggested by urban planners vs. those recommended by real estate advisers. In particular, expanding permitted uses would not harm any public interest but would make the site more attractive for investors and thus increase revenues that land would generate at auction by more than 700,000 Euro.

<p><b>Scenario-1 (suggested by urban planners):</b> Permitted land uses are an “industrial zone” defined as production &amp; warehouses; auxiliary offices up to 14% of the total floor space</p> <p><b>Floor area:</b> Production &amp; warehouse: 60,000 m2 Office: 10,000 m2 <i>Total: 70,000 m2</i></p> <p><b>Prices expected at auction:</b> Euro 14.5/m2, on average  (or <b>1.5 million Euros</b> for the entire site)</p>	<p><b>Scenario-2 (according to a market study conducted by real estate experts):</b> Permitted land uses are production &amp; warehouses; offices; retail &amp; retail-related warehouses (such as a showroom, discount retail store, or home improvement center)</p> <p><b>Floor area:</b> Production &amp; warehouse: 40,000 m2 Office: 10,000 m2 Retail &amp; related warehouse: 20,000 m2 <i>Total: 70,000 m2</i></p> <p><b>Prices expected at auction:</b> Euro 15/m2 (office/warehouse), on average Euro 37/m2 (retail/warehouse), on average (or <b>2.16 million Euros</b> for the entire site)</p>
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Source:

Kaganova, Olga et al. (2012). *Guidebook on Packaging and Marketing Municipal Land to Investors*. Urban Institute, IDG Asset Management Toolkit, No. 2.

Meanwhile, experiences in counties that have successfully applied complex LVC instruments, such as sales of development rights and land readjustment techniques (e.g., Japan), indicate that flexibility in the municipal approach is a pre-requisite for successful compromise between the multiple parties involved (i.e., property owners, investors, surrounding communities, and municipal governments themselves). For example, the success of transport-oriented development (TOD) around rail and metro stations in Tokyo has been based, to a large extent, on flexible revisions of land use zoning within such areas (i.e. rezoning from single-use to mixed use, increase of permitted density, etc.) as well as on the pursuit of consensus solutions that satisfy most of the involved parties.

In countries with inflexible land use planning and management that are out of touch with market realities, municipalities sustain multiple losses (even with simple LVC instruments such as land leases or sales), including forgone revenues, unmaterialized economic activity and jobs, and reductions in affordability of formal housing (Bertaud, 2019). More sophisticated LVC instruments, which explicitly require flexibility (e.g., JDAs, air rights, sales of development rights & density bonuses) can hardly be expected to succeed in such environments.

Therefore, transforming land use planning and management into a more market-oriented mode is a serious systemic precondition for most of the LVC instruments from the first two groups. Part of

this includes extensive training for local urban planners and land managers on the basics of real estate economics and private sector expectations.

Another important lesson that comes from areas that have used site-specific LVC instruments is that in practice such projects often are hybrids of several instruments. The example of the Toronto Parking Authority in Chapter 3 illustrates this. This implies that regulations that enable LVC instruments must be broad enough to allow for hybrid deals and creative approaches. However, at the same time, they should protect public interests by limiting government entities ability to expose public assets or funds to unnecessary risks, especially related to speculative (i.e., profit-seeking) real estate investment. As the very least, the preparation of such deals should be approved by local elected councils and be conducted in a transparent manner.

***c. Fiscal autonomy and financial management capacity***

From a public finance viewpoint, in order to implement LVC instruments, several components of municipal fiscal autonomy and local financial management must also be in place.

**1. Autonomy in revenue raising**

Infrastructure costs and beneficiaries of municipal development vary not only among municipalities, but between development areas within a municipality as well. Municipalities should be empowered with a certain autonomy for setting rates, fees and charges - within limits defined by law or by following regulated charge setting methods. This autonomy is critical for LVC instruments such as the local property tax, developer charges and exactions, and special assessment districts.

**2. Budgeting system and budget planning capacity**

The actual design of the LVC instruments should be a part of the municipal financial planning process, and municipalities should have sufficient autonomy to independently *plan* and *approve* their own capital investment plans and current budgets. This is especially true for certain LVC instruments, such as developer charges and exactions.

While planning the use of an LVC instrument for funding capital investment, in some cases, such as TIF, it should pass the “*but for*” test (see Merriman, 2018). It is a simple question to answer: would not the planned development happen in the reasonable future solely through private investment? If the answer is no, then this substantial factor test is passed, the LVC instrument can be rightly used.

**3. Capital cost monitoring and allocating capacity**

Developer charges and exactions also pose serious demands on the municipality’s ability to estimate and allocate the associated infrastructure costs, as discussed in connection with this instrument in Chapter 6. The questions to answer are how much of the public services costs developers should pay, and what these costs are. The first question requires a policy answer, but the second requires an accounting system, which is able to produce cost information by functions (by services). Once total costs are estimated, then they should be shared among the project beneficiaries. It can be implemented by defining the benefits received by future land owners and

specifying the *criteria (indicators)* for allocating the benefits in a development area. They might be simple indicators like property area or size of property street front.

#### **4. Revenues earmarking and discretion**

Revenues collected through some of the LVC instruments (e.g., the property tax) are typically treated as general purpose revenues. However, some LVC instruments (e.g., land sales, sales of development rights, developer charges) produce revenues that are distinctively targeted for capital investment, either in full or partially. Given that planning and executing municipal capital investment is a multi-year process, these revenues should be earmarked and placed in a special multi-year capital investment fund. The fund should be insulated, to some extent, from the municipal operating budget, in order to avoid using the fund to cover operating deficits. A protected fund can serve to compensate for revenue fluctuations resulting from real estate market volatility and hence stabilize funding for capital investment over the mid- and long term (Peterson, 2013).

A systemic challenge, however, is that in many countries, local governments fiscal autonomy is insufficient; in particular, they are not allowed to have multi-year funds (or they are highly disincentivized, because central governments would reduce intergovernmental transfers by the amount accumulated in such a fund). This is a substantial obstacle for prudential use of revenues generated through LVCs such as land sales, sales of development rights, and developer charges. Furthermore, public budgeting systems are not generally well-suited to protect special funds. Indeed, even if a multi-year fund is established, the local council can typically override the fund's protections and dip into it for purposes that are not part of the fund's mandate.

##### ***d. Special purpose government corporations - a solution for implementing complex LVC instruments?***

One potential solution to the above problem of unprotected capital investment funds is the creation of a government-owned corporation that would deal with surplus property and channel revenues into infrastructure assigned to a corporate mandate. There are impressive examples of how such corporations handle the enhancement of the land they receive and channel the revenues into funding specific urban infrastructure. Chapter 3 presented two such examples: one in Orestad near Copenhagen in Denmark and another in Hong Kong's Mass Transit Railway (MTR) Corporation.

While specialized asset management or land development corporations have many advantages, such as the ability to avoid governmental bureaucracy, attract and retain professional experts by paying market-based compensation, etc., their record is mixed. One concern is that they may not be self-sustaining for site/area-specific LVC instruments, unless they operate in large/mega-cities with rapid urban population and strong economic growth, which create high demand for land, lead to property prices increases, and especially in locations with high accessibility (Susuki, 2017). Another issue is that the success of such corporations depends, to a great extent, on the quality of their governance (Detter & Folster, 2017). This implies that if such a corporation is considered, a

great deal of attention should be given to a careful conceptual design that addresses all aspects of governance.<sup>13</sup>

## 8. Conclusions

The LVC instruments we have discussed are often quite different – in their characteristics, capacities and roles - in municipal finance, infrastructure funding and delivery, and local economic development. What most of them have in common, however, is that their benefits are incurred by local governments.

Classification of LVC instruments into three groups based on the source of their mandate—namely, (i) government control over government-owned land, (ii) government power to regulate land uses / land–use parameters on both public and private land, and (iii) government power to mandate taxes, fees, and in-kind contributions on private land (fiscal instruments) – helps to identify common issues within each group and, most importantly, which level of government and which agencies need to be engaged into addressing them.

The paper identifies and analyzes 15 key LVC instruments discussed in the existing literature, insofar as they have been used in at least two countries. In addition, we suggest adding to the LVC terms commonly in use a new instrument, *intensification of land uses on public-use land*. It has a substantial potential and multiple benefits, and unlike other instruments, it can benefit any level of government that controls some amount of land or real estate.

All instruments are analyzed within a unified framework, which includes arguments for and against each instrument. Each instrument is also illustrated by examples. This analysis allowed for an assemblage of the following key characteristics for each instrument (Annex 1):

- a. What are primary public benefits
- b. Who pays: owner/ lessee or developer
- c. Whether private participation is mandatory or voluntary
- d. Whether municipal regulatory powers (discretion) is needed
- e. How wide is the payers' base
- f. Scope of global usage
- g. Critical pre-requisites and implementation requirements.

This information and data should help readers navigate through the often complex and multi-faceted process of assessment of what instruments may be good candidate(s) for implementation within the context of a particular country or city.

The instruments based on government-owned land and regulatory power over land uses (Chapters 3 and 4) vary substantially, all with their own limitations and specific niche uses. Most of them are site- or area-specific and hence have a narrow payers' base, especially compared with the more common fiscal instruments, such as the property tax, real estate transfer tax, or developer charges. Another disadvantage of some instruments (e.g., JDAs, air rights, sales of development rights, and

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<sup>13</sup> Detailed outline of issues to be included into governance of government-owned land development corporation are presented in Kaganova (2011)



land readjustment schemes) is that they are complex and expensive to prepare and are financially viable for the private sector only in high-demand locations, so these instruments cannot be widely utilized. However, a substantial advantage of instruments based on government-owned land and regulatory power is that in most countries, they can be implemented locally without requiring new legislation by higher levels of government.

Further, the benefits that could be generated by these two groups of instruments are artificially limited, in many cases severely so (as a simple example: revenues from leases and sales of municipal land). There are two major causes of these forgone benefits: (i) lack of good governance and professional capacity in public land management; and (ii) government overregulation of land uses and land-use parameters. Building government capacity in these two areas appears to be an important opportunity to improve the effectiveness of LVC instruments. However, good governance in government asset management itself is very much a work in progress, even in advanced countries. Moreover, to establish good governance at the municipal level, where most LVC instruments apply, the upper levels of government need to strike a delicate balance between imposing mandatory requirements, such as market pricing of municipal land, on one hand, and granting municipalities flexibility and autonomy in regulating and managing land, on the other hand.

The fiscal instruments discussed in Chapter 5 vary, with property tax being the most common (used in more than 100 countries), large, and stable source of OSR, to the betterment charge – a relatively obscure instrument with limiting characteristics. As a source of revenues, the property tax is the dominant instrument by far: it produces 94% of all property-related revenues in the budgets of the OECD countries. This figure does not include, however, the value of land and infrastructure contributed by the private sector through in-kind instruments such as developer exactions and JDAs. Their fiscal impact lies in the fact that they enable municipalities to avoid related capital or operating costs, but data is not available to quantify this contribution in monetary terms.

No universal generalization about certain fiscal instruments being universally more preferable than others would be entirely correct. However, the authors posit that the information in this paper, supported to a large extent by their practical experiences, indicates that there are two core LVC instruments that would typically benefit most local governments the most: the property tax and developer charges / exactions. These instruments are advantageous in that they have a relatively wide payers' base, stable revenue streams, and prerequisites that, to a large extent, could be satisfied during an implementation process (even if in a form that will require further improvements); in addition, they are widely and successfully deployed internationally. At the opposite end of this spectrum, as the least likely fiscal instruments to be relevant, are the already aforementioned Tax Incremental Financing and betterment charge. Both have difficult prerequisites, are difficult and expensive to administer, and have enjoyed only limited international success.

The fiscal Land Value Capturing instruments can be used effectively only in a supportive public financial environment. In particular, several components of municipal fiscal autonomy and local financial management have to be in place. In particular, the local revenue raising powers, fiscal planning capacities, and discretion in budget implementation are critical conditions.

## 9. Annex 1: Summary Characteristics of Internationally Tested LVC Instruments

LVC instruments	Primary public benefits (fiscal, in-kind, local economic development (LED), service delivery)	Who pays (owner/lessee or developer)	Private actor participation (mandatory; voluntary)	Municipal regulatory powers (discretion needed: Yes/No)	How wide is the payers' base (wide; medium; rare)	Scope of global usage
1. <b>Leases or concessions</b>	Fiscal: Increased revenues LED: space for private economic activities Service provision by private partners	Lessee/ concessionaire	Voluntary	Yes	Varies; usually rare	Widely used for short-term leases of temporary vacant municipal land/property; Very rarely used for commercial investment projects
2. <b>Land / property sales</b>	Fiscal: Increased revenues LED: land released for private economic activities	Future owner	Voluntary	Yes	Rare	Widely used
3. <b>Joint Development Agreement (JDAs)</b>	Fiscal: Expenditure reduction or in-kind - when a private partner pays for or builds a public facility (e.g. a railway station) in a <i>cost-sharing</i> JDA Fiscal: Revenues from sales of speculative real estate (e.g. apartments) financed and built by the developer under a <i>revenue-sharing</i> JDA	Developer	Voluntary	Yes	Rare	Cost-sharing JDAs for delivering public-use facilities are widely used in many OECD countries (as PPPs) Profit-seeking (speculative) revenue-sharing JDAs are rarely used by governments
4. <b>Air-right contract</b>	Fiscal: Increased revenues LED: more intensive use of urban space	Developer	Voluntary	Yes	Rare	Used in many countries (Canada, France, India, Philippines, the US, Poland, etc.), in particular by government entities managing railroads, highways, roads, TOD

Land Value Capture: Guidance for Practitioners

LVC instruments	Primary public benefits (fiscal, in-kind, local economic development (LED), service delivery)	Who pays (owner/lessee or developer)	Private actor participation (mandatory; voluntary)	Municipal regulatory powers (discretion needed: Yes/No)	How wide is the payers' base (wide; medium; rare)	Scope of global usage
5. Naming rights	Fiscal: Increased revenues	Buyers of this right	Voluntary	Yes	Rare	At least at least in 38 countries, including Australia, Brazil, China, Finland, Mexico the UK, and the US
6. Intensification of land uses on public-use land	Fiscal: budgetary savings and revenues from releasing vacated properties LED: additional land for economic uses	Not applicable	Mandatory	Yes	Rare, but on the rise	Central governments of Australia, Canada, New Zealand, the UK, and the US. Sporadically by local governments in China, Canada, and the US
7. Sale of development rights / density bonuses	Fiscal: Revenues for funding infrastructure In-kind: a public-use facility on private land (e.g. children playground, etc.) LED: more intensive use of urban land	Developer	Voluntary	Yes	Rare	Used in some big cities in many OECD countries, Singapore, and some cities in Brazil
8. Conversion fee	Fiscal: Increased revenues	Owners	Mandatory	No	Medium	Global scope is not clear; broadly used in India, Indonesia, and the US; was abolished in Denmark
9. Land readjustment	Main benefit is unique: land parcels become suitable for development/redevelopment In-kind: land for public uses Fiscal: recovery of infrastructure costs	Owners	Voluntary first, mandatory later	Yes	Rare	Germany, Japan, India, Ethiopia, South Korea, Philippines

Land Value Capture: Guidance for Practitioners

<b>LVC instruments</b>	<b>Primary public benefits</b> (fiscal, in-kind, local economic development (LED), service delivery)	<b>Who pays</b> (owner/lessee or developer)	<b>Private actor participation</b> (mandatory; voluntary)	<b>Municipal regulatory powers</b> (discretion needed: Yes/No)	<b>How wide is the payers' base</b> (wide; medium; rare)	<b>Scope of global usage</b>
<b>10. Local property tax</b>	Fiscal: increased own-source revenue	Owner/ (tenant)	Mandatory	No	Wide	Canada, the USA, Latin America (16 countries), Europe (33 countries), Asia (24 countries), Africa (25 countries)
<b>11. Tax increment financing</b>	Fiscal: recovering infrastructure development cost Infrastructure service improvement	Owners	Mandatory	Yes	Wide	All US states Medium/large scale infrastructure investment, urban regeneration, environmental rehabilitation
<b>12. Betterment charge</b>	Fiscal: Increased revenues	Owners	Mandatory	Yes	Rare	Very limited use: Israel, Spain, and a few cities in Latin America Was canceled in the UK, Australia; no success in Poland
<b>13. Special Assessment District</b>	Fiscal: recovering infrastructure development cost	Owner	Mandatory	Yes	Not known	USA Medium/large scale infrastructure development (roads, water)
<b>14. Real estate capital gains tax</b>	Fiscal: Increased revenue	Owner, Seller or Buyer	Mandatory	No	Medium	Limited use. Value increment is more captured by national income tax (capital gains tax). Taiwan, Colombia, Mexico, Spain, Poland (on conversion only),

LVC instruments	Primary public benefits (fiscal, in-kind, local economic development (LED), service delivery)	Who pays (owner/lessee or developer)	Private actor participation (mandatory; voluntary)	Municipal regulatory powers (discretion needed: Yes/No)	How wide is the payers' base (wide; medium; rare)	Scope of global usage
<b>15. Real estate transfer tax</b>	Fiscal: increased revenues (own source or shared)	Seller or Buyer (can vary))	Mandatory	No	Medium	France, Singapore, Russia, Turkey, the USA
<b>16. Developer charge/exaction</b>	Fiscal: Revenues for funding infrastructure In-kind: land dedicated for public use on large projects; Public facilities / infrastructure in leu of payment	Developer	Mandatory	Yes	Medium	Widely used for funding off-site infrastructure and municipal services (e.g., subsidized housing)

LVC Instruments	Critical pre-requisites and implementation requirements
<b>1. Leases or concessions</b>	<ul style="list-style-type: none"> <li>• Policy to distinguish commercial market-price leases from below-market social-service leases</li> <li>• Regulations allowing good-quality leases (e.g. for investment projects – up to 50 years; subleases permitted by default, various rent structures, etc.) and transparent, effective procurement</li> <li>• Municipal capacity for procuring and managing leases</li> </ul>
<b>2. Land / property sales</b>	<ul style="list-style-type: none"> <li>• Explicit local policy to sell vacant, underused, or unwanted properties (e.g. shopping malls on leased land)</li> <li>• Regulation that establishes a good-practice &amp; risks prevention framework and requirements for land sale procurement and use of proceeds for infrastructure investment</li> <li>• Strategic plan for public land management (10-15 year time horizon)</li> </ul>
<b>3. Joint Development Agreement</b>	<ul style="list-style-type: none"> <li>• Policy that differentiates <i>cost-sharing</i> JDAs from <i>profit-seeking (speculative) revenue-sharing</i> JDAs; this policy should encourage the <i>cost-sharing</i> JDAs and discourage <i>speculative revenue-sharing</i> JDAs</li> <li>• Regulation allowing municipalities to enter <i>cost-sharing</i> JDAs for delivery of public facilities / infrastructure but limiting participation in <i>speculative revenue-sharing</i> JDAs</li> <li>• Very advanced municipal capacity for conceptualizing, preparing, procuring, negotiating, and managing JDAs</li> </ul>
<b>4. Air-right contract</b>	<ul style="list-style-type: none"> <li>• Regulations allowing air-rights leases or JDAs</li> <li>• Regulation and zoning allowing public-private use of land sites</li> <li>• Capacity at municipalities to negotiate and manage such contracts</li> </ul>
<b>5. Naming rights</b>	<ul style="list-style-type: none"> <li>• A clear local policy on naming rights, formulated and approved by an appropriate body (e.g. a local elected council, etc.)</li> <li>• Proper earmarking of naming revenues for O&amp;M of the facility / system</li> </ul>
<b>6. Intensification of land uses of public-use land</b>	<ul style="list-style-type: none"> <li>• An explicit policy and implementation plan</li> <li>• If reduction of public service consumption is envisioned, serious public communication campaign</li> <li>• Incentives to entities or communities involved, in order to overcome opposition or lack of enthusiasm for implementation</li> </ul>
<b>7. Sale of development rights / density bonuses</b>	<ul style="list-style-type: none"> <li>• Policy, implementation regulation, and master plan and zoning that allow sales of development rights</li> <li>• Administering issues addressed (a formula for assessing building rights; approval process; forms of payment; etc.)</li> <li>• Advanced capacity among urban planners and administrators</li> </ul>
<b>8. Conversion fee</b>	<ul style="list-style-type: none"> <li>• Policy and implementation regulation</li> <li>• Administrative procedure that automates approvals and excludes discretion by government officials</li> <li>• Capacity among urban planners and administrators</li> </ul>
<b>9. Land readjustment</b>	<ul style="list-style-type: none"> <li>• A special law allowing / framing the process</li> </ul>
<b>10. Local property tax</b>	<ul style="list-style-type: none"> <li>• Political will to introduce value-based property tax</li> <li>• Land registry with detailed information on properties and owners</li> <li>• Capacity for property value assessment (or proxies)</li> <li>• Tax administration capacity (billing, collection, enforcement)</li> </ul>
<b>11. Tax increment financing</b>	<ul style="list-style-type: none"> <li>• Local value-based property tax fully implemented</li> </ul>

LVC Instruments	Critical pre-requisites and implementation requirements
<b>12. Betterment charge</b>	<ul style="list-style-type: none"> <li>• Medium/long term capital investment plan</li> <li>• Ability of municipalities to borrow (to issue municipal bonds)</li> <li>• Local value-based property tax fully implemented</li> </ul>
<b>13. Special Assessment District</b>	<ul style="list-style-type: none"> <li>• Medium/long term capital investment plan</li> <li>• Ability to assign costs to owners in project area</li> <li>• Targeted revenue raising and administration (collection) capacity</li> <li>• Capacity to raise funds up-front for financing large scale investment projects</li> </ul>
<b>14. Real estate capital gain tax</b>	<ul style="list-style-type: none"> <li>• Local value-based property tax fully implemented</li> </ul>
<b>15. Real estate transfer tax</b>	<ul style="list-style-type: none"> <li>• Clear ownership rules on property</li> <li>• Developed contractual culture and deed management</li> </ul>
<b>16. Developer charge/exaction</b>	<ul style="list-style-type: none"> <li>• Infrastructure cost assessment: cost information produced by the accounting system</li> <li>• Capacity to allocate costs and negotiate in-kind contributions</li> <li>• Transparency in cost allocation</li> </ul>

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