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INSTITUTIONAL ARRANGEMENTS AS A CATALYZING INSTRUMENT FOR LAND VALUE CAPTURE PROCESSES IN PUBLIC TRANSPORTATION PROJECTS

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Abstract

Finding better ways to steer cities densification and to use its effects towards the provision of public services and infrastructure, might be one of the most challenging tasks for local governments. In this context, land value capture (LVC) tools and policies are arousing as innovative mechanisms that could serve to accomplish a two-way goal: to fund public construction and to enhance accurate urban development. However, recent studies have shown that its implementation is still scarce¹ due to several issues that are rooted mainly in two causes²: weak institutional capacity to align urban development with other technical processes (transportation or economic planning) and strong cultural and legal ties on full protection of private property.

Among other urban processes, public transportation projects in cities in developing countries represent at the same time an opportunity and a challenge for public administrations to benefit from the deep transformation that this kind of project involves and to canalize its impacts into a new revenue source to fund those same projects.

In this path several cities in Latin America, are starting to search better ways to use LVC instruments on metro systems implementation, to recover part of the public investment that those kinds of systems represent but also as a mechanism to steer urban development processes in the influence area to guarantee accessibility for users, intermodality between modes of transportation and environmental sustainability. On this matter, the latest recommendations from the literature have overcome traditional approaches that focused on needing more and detailed regulations to propose improvements on institutional capacity underpinned by a fluid dialogue among fiscal, planning and judicial entities and promotion of public understating around LVC and active participation of stakeholders.

¹ *Ibídem* p. 2

² BLANCO, Andres ET.AL, “*Expandiendo el uso de la valorización del suelo: La captura de plusvalías en América Latina y el Caribe*”, BID, 2016, p. II



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Under that perspective, the present paper studied the cases of Bogotá- Colombia, Ciudad de Panamá, Panamá and Quito-Ecuador where the implementation of metro systems are in different stages as well as the LVC instruments execution, to understand how these cities and countries are using or planning to use LVC instruments, focusing on the legal mechanisms that are being used and institutional arrangements that are behind all those processes

To understand the cases and in order to propose comparative conclusions, all the cities were studied before the main reflections of literature on LVC progress:

- i. Create and strengthen institutional capacity to use LVC instruments.
- ii. Build up dialogue spaces and mechanism between urban planning and transport entities.
- iii. Increase knowledge about theory and practice in order to provide evidence to public officials and citizens on the impacts and benefits of LVC processes.
- iv. Promote greater public understanding of LVC policies by engaging landowners and stakeholders around the solution of a locally recognized problem that would represent direct benefits for them.
- v. Define mechanisms that could enable communication between public actors and with the community

From those cases where the metro is under construction to those where the bidding processes to advance the project have not even started, dealing on ways to recover part of land increases that transportation system would generate, is taking local administrations and public entities to reflect on legal concepts and institutional competences showing that the attention should be focused there as a catalyst instrument that could definitely determine the success or fail of LVC processes implementation.

Key Words:

Land value capture

Institutional arrangements



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Land use

Legal framework

Public transportation

Introduction

The purpose of the document is to understand how institutional arrangements could work as an innovative mechanism that could catalyze Land Value Capture (LVC) processes implementation, through the study of four (4) case studies of metro systems in cities in Latin America: Bogotá, Panamá y Quito. LVC mechanisms as means to enhance accurate urban development and fund public works and transport system implementations, could be understood as one of the fundamental tools that need to use by cities in Latinamerica. However, its execution has been infrequent, and cities had had to deal with crucial discussions on how LVC could be put in real practice, even when finding new sources is becoming an arising need specially for public transport systems. The literature on this subject has recently set the attention on institutional arrangements (IA), understood as the public and private actor's interaction network, that are needed to support LVC processes, therefore understanding how some cities are starting to address this issue offers the opportunity to reflect on IA's role in LVC processes optimization.

Three cases where chosen because of the state of implementation of their transport system and their different legal and institutional frameworks that could enable or disable LVC implementation. Bogotá, have not started the metro construction but the legal framework and the Metro Company could be considered the most progressive one as the local administration has competences to adopt the main decisions about LVC implementation and the national and local regulations includes several LVC mechanisms. Panamá, has already built the first line and the second one is under construction, however its legal and institutional framework could be considered restrictive for LVC implementation, as the main decisions are concentrated at a local level and the legal framework is weak to enforce LVC instruments development. In Ciudad de Quito the First Line is under construction, shows a different perspective as the recent national legislation includes LVC instruments that changes the way the private property has traditionally understood and concentrates important decisions at a local level.



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The paper is organized as follows: in the first section are explained the basic concepts related with LVC processes and how the study would focus in the legal and institutional roots that support those processes. The second section would draw a general landscape on LVC implementation in Latinamerica regarding on recent literature, providing a general context on the three countries where each city is localized that would frame the case study analysis. The third part of the text would show the case study conducted for each city, following a general methodology that seeks to formulate comparative analysis. Finally, the paper explains the main conclusions obtained.

1. Basic concepts on Land Value Capture and its relationship with normative framework and institutional arrangements.

The basic notion of Land Value Capture (LVC) could be understood as follows “*mobilize for the benefit of the community at large some or all the land value increments (unearned income) generated by actions other than the landowner’s such as public investments in infrastructure or administrative changes in land use norms and regulations*”³. As is it would be explained before, even though this notion is getting to become popular on urban and public finance discussions, many fundamental concepts behind the definition are still object of debate, some of the most common questions are:

- ¿It is possible to charge a landowner with tax instruments or planning obligations in order to recover part of public investments?
- ¿How is possible to determine whenever the land value increments are and unearned income?
- ¿Which percentage of the land increasement may (or may not) be effectively recovered?
- ¿Are just local administrations entitled to applied LVC instruments?

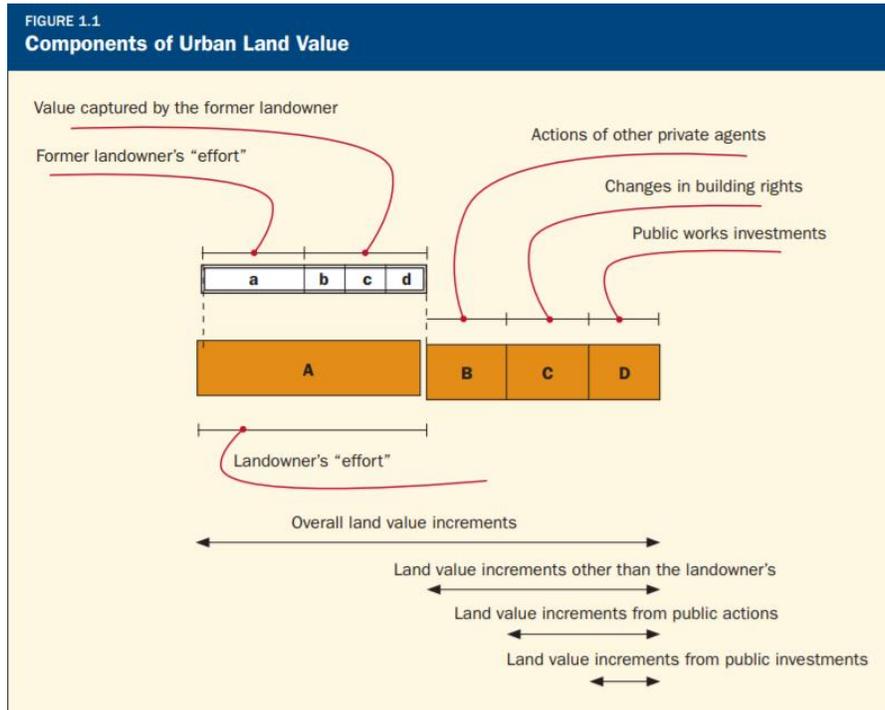
Dealing on how to answer those questions are crucial debates around urban planning processes, that might vary regarding on each country or even on each city around the worlds, because they are rooted in different legal principles and institutional arrangements. Using instruments that could charge landowners do to public decisions or understanding that the property rights do not imply the right to build, are not issues that could be taken by granted in every country in Latin America. In this same sense, the debate on if are mayors in cities those that need to in charge of using LVC or if it’s the national level authorities the ones that should do it.

³ SUSUKI Hiroaki, “Financing Transit- Oriented Development Land Values”, Adapting Land Value Capture in Developing Countries”, World Bank Group, 2015, p. 2



To start, is important to revisit the notion, and empathize those aspects that are strictly related with legal contents and mechanisms. As it was explained before, the concept of land value increases or land value gain that can be recovered, is supported by the difference between the land price without any public interventions and the price that buyers are willing to pay, after the public intervention, that does not correspond to an effort of the landowner.

Figure 1 Components of urban land value



Source: Smolka (2013) – Adapted from Furtado, Biassotto, and Maleronka (2012)

The previous figure shows the roots for LVC remain on public decisions (public works, investments or legal action, that could impact land values, and because the increase is not strictly caused by the landowners, part of that increase could be recovered by the authority that adopt that public decision.

In this same way, the instruments that could be used to recover that value are also based on public regulations and processes. Several classifications regarding on the characteristics of those instruments are



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being proposed by the literature. The World Bank, in the document “Financing Transit- Oriented Development Land Values”, Adapting Land Value Capture in Developing Countries”, uses the following organization:

Figure 2 Land Value instruments classification

Table O.1 Selected land value capture instruments

	Instrument	Description
Tax- or fee-based	Property and land tax	Tax levied on estimated value of land or land and buildings combined, with revenues usually going into budgets for general purposes.
	Betterment charges and special assessments	Surtaxes imposed by governments on estimated benefits created by public investments, requiring property owners who benefit directly from public investments to pay for their costs.
	Tax increment financing	A surtax on properties within an area that will be redeveloped by public investment financed by municipal bonds against the expected increase in property taxes. Mainly used in the United States.
Development-based	Land sale or lease	Governments sell developers land or its development rights, whose values have increased thanks to a public investment or regulatory change, in return for an up-front payment, leasehold charge, or annual land rent payments through the term of the lease.
	Joint development	A well-coordinated development of transit station facilities and adjacent private properties between transit agencies and developers, where the latter usually contribute physically or financially to the construction of the station facilities, as their property value will increase thanks to the transit investment. Used in Japan, the United States, and other countries.
	Air rights sale	Governments sell development rights extended beyond the limits specified in land use regulations (such as floor area ratios [FARs]) or created by regulatory changes to raise funds to finance public infrastructure and services.
	Land readjustment	Landowners pool their land and contribute a portion of their land for sale to raise funds and partially defray public infrastructure development costs.
	Urban redevelopment schemes	Landowners and a developer establish a cooperative entity to consolidate piecemeal land parcels into a single site that they then develop (such as a high-rise mixed-use building) with new access roads and public open spaces. The local government modifies zoning codes and increases maximum FARs in the targeted redevelopment areas (typically around rail transit stations) and finances the infrastructure. Mainly used in Japan.

Source: SUSUKI Hiroaki (2015)

According to the previous figure, mechanisms that are *tax or fee-based* are supported by taxes implementation as property and land taxes in different modalities and by the execution of betterment charges a funding alternative that funds a public work by distributing their cost among the owners that would be benefit by it. Therefore, the legal taxation framework that is in vigor in each context would determine how tax LVC instruments are understood and how they could effectible be applied. As the case studies would show, even though taxation processes could be considered as a traditional practice that is legitimate and accepted by the citizens, in some countries tax implementation are still scarce.

In the case of the instruments that classified as *development-based*, its implementation depends on planning processes and urban projects development, as they are underpinned by a combination of the general notion of LVC and a public principle that draws a difference between the property rights, and the possibilities to urbanize and build, as the latter actions could only take place under public regulations. These mechanisms



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are supported in a different notion than de tax-based instruments, as the legal imposition of the development-based instruments is part of the public function of deciding on land uses and purposes, as important restrictions for private property rights.

2. General context around Land Value Capture in Latinamerica.

Countries in Latin America are facing two challenges to advance LVC implementation, that are closely related: guaranteeing the correct implementation of this type of instruments, and an advance in its recognition as an alternative funding source for urban development.

According to Habitat III, reaching reliable alternatives to overcome this type of challenges is a recurrent topic in the *New Urban Agenda*. Cities in Europe, Asia, the United States and Latin America have decidedly advanced in the definition of financing schemes involving value capture processes based on the recognition of the greater value notion generated by external causes to the owner that can be legitimately recovered and reinvested in urban development

However, as pointed in recent literature, the correct implementation of these instruments faces significant difficulties, which rely on the required institutional framework and on the poor articulation of the entities involved in their development. Frequently, local governments face legal and political restrictions (at the national level) which prevents them to act with enough autonomy to implement non-conventional financing instruments (Flint, 2016). In addition, the institutional weaknesses and the fragmented structuring of institutional schemes do not allow an appropriate coordination between public entities and private actors in the financing of large-scale urban development (Susuki, 2015).

In this context, is important to take into consideration how the countries for each case are using LVC instruments. Colombia has achieved significant advances in defining a regulatory framework, which, at the Constitutional level, expressly grants municipal administrations the power to capture the greater value derived from city planning actions, and also incorporates various planning, land management and financing instruments to that effect in its legislation. Nevertheless, having extremely detailed regulatory frameworks has proved not be enough. According to the IDB, “(...) *one of the dominant and problematic features of the Colombian experience is its complex legislation: it has many details and it is loaded with procedures. In*



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*addition, there is a tendency to generate continuous adjustments, which are aimed to solve existent problems before advancing in the application”.*⁴

Ecuador is recognized as one of the countries that is timidly starting to apply LVC processes using mainly tax based instruments related more with public works construction, that with public transport systems or urban development projects⁵. However, recent regulations have advance towards a different perspective as the Law of the territorial development, land use and management (Ley orgánica de ordenamiento territorial, uso y gestion de suelo) enacted in 2016 introduced important concepts and mechanisms that are orientated to enforce the public administration role in urban planning processes. Thus, the planned based LVC instruments are starting to play and important role, especially regarding on how to allocate building rights.

Panamá shows a different context, according to a study conducted by CAF in 2014, as general balance Panamá has only reported experiences on betterment taxes implementation but more than 20 years before with no other recent cases. The legal framework shows a difficult context where their legal framework directly related with LVC processes is old and has been scarcely applied but recent regulations are seeking to advance two crucial processes that could change that situation: urban planning instruments execution at local level and decentralization transferring competences from the national to the local level.

3. Case studies

Regarding on basic notion of LVC processes, the different kind of instruments that could be applied and the general context of each country, the cases analysis was conducted to compare the following aspects:

Aspect	Content	Importance for LVC analysis
LVC instruments regulation	LVC instruments included at national or local level. Includes those mechanisms that are not strictly categorized as LVC ones.	Direct inclusion of LVC mechanisms as part of regulations at national and local level is considered one of the main issues to advance in LVC processes. Even though in some cases other instruments that are not categorized as LVC

⁴“*Expandiendo el uso de la valorización del suelo: La captura de plusvalías en América Latina y el Caribe*” - <https://publications.iadb.org/handle/11319/7799#sthash.77ontm4C.dpuf>

⁵ Ibid, p. 14



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Aspect	Content	Importance for LVC analysis
		mechanisms could enable to recover land value through taxes imposition or urbanistic obligations execution.
Political organization	Competences allocated at national level for transport decisions and urban planning processes.	LVC instruments, both taxed and based mechanisms implementation are determine on the kind of decisions that could be adopt by the national goverments and local adminsitrationes.
Property rights understanding	How the legal framework understands that the property rights could be: <ul style="list-style-type: none"> i. Restricted (by urban obligations and conditions). ii. Separated from the right to build and urbanized. 	Imposition of LVC mechanisms is underpinned on the property rights concepts.
Urban planning and transportation interaction	Instruments and institutional mechanisms to coordinate actions between these two sectors.	Advance successful LVC processes is related in how those two sectors understand its relationship.
Public and private networks for urban planning and publica transportation.	Public organizations specialized in those strategic processes. Public- private spaces for interaction and discussion.	Institutional arrangements and actor’s coordination should support LVC implementation processes.



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3.1. Bogotá- Colombia

The study on this case shows the following outcomes:

Aspect	Outcome	Competences in urban planning	Competences in public transportation	Enable or disable LVC implementation
LVC Capture instruments	The national and local level had included LVC instruments both taxed and development based.			The instruments that are included at the legal framework enables the implementation of LVC processes.
Political organization	According to the Constitution of 1991, Colombia is organized as unitary republic where the local administrations have autonomy to adopt their decisions under the national legal framework.	Municipalities could define their land management model under the instruments and parameters define by the national government.	The national government authorizes the different modes and transport operations. The municipalities define the transport system implementation conditions: <ul style="list-style-type: none"> - Location - Routes - Extension 	The political organization in Colombia, could be considered as an aspect that enables LVC implementation as the local administrations could decided how to use LVC instruments and also to adopt important decisions on public transport development.



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Aspect	Outcome	Competences in urban planning	Competences in public transportation	Enable or disable LVC implementation
Property rights understanding	National and local legal framework understands that the right to property is related with obligations and therefore the urban planning instruments could establish restrictions. However, the distinction between property rights and right to develop and urbanize is not fully clear on the current legal framework.			The current legislation disable full implementation of all kind of LVC instruments.
Urban planning and transportation interaction	Urban planning and transport sector have several interactions mechanisms.			The interaction between sectors could be considered as factor that enable LVC implementation.
Public and private networks for urban planning and public transportation.	The local administration has a Transport and Mobility Secretary and also a Metro company.			The existing institutional network could be considered a aspect that



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Aspect	Outcome	Competences in urban planning	Competences in public transportation	Enable or disable LVC implementation
	The interaction between private and public actors is scarce.			enables LVC implementation.

3.2. Ciudad de Panamá:

Aspect	Outcome	Competences in urban planning	Competences in public transportation	Enable or disable LVC implementation
LVC Capture instruments	The only instrument that has a complete regulation is betterment taxes, however it have not been used since 1970. Planning instruments provided by the Law 6 of 2006 are considered as mechanisms that could works as LVC.			The absence of specific LVC instruments disable LVC implementation.
Political organization	According to the national constitution the central	There are several planning instruments at	The national government decides on:	The political organization in Panamá needs to complete



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Aspect	Outcome	Competences in urban planning	Competences in public transportation	Enable or disable LVC implementation
	government concentrates all the competences and since 2011 is starting to transfer some of the to the municipalities.	local, regional and national level, however the national level is entitled to adopt some of those even changing local decisions.	<ul style="list-style-type: none"> - Modes and organization. - Routes - Localization - Infrastructure 	the decentralization in order to enable LVC implementation, as at the moment local administrations has scarce space to adopt decisions.
Property rights understanding	Property rights and specially the right to build was understood as unrestricted until 2006, therefore urban conditions imposition and any other property restrictions have been oddly applied.			The current understanding of property rights could disable LVC implementation.
Urban planning and transportation interaction	Both processes have been understood as separated sectors. However from the urban planning perspective the Land Management Plans (POT) have started to			The POTs could work as and instrument that aligns urban planning and transportation systems, helping to enable LVC implementation.



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Aspect	Outcome	Competences in urban planning	Competences in public transportation	Enable or disable LVC implementation
	include decisions for urban mobility.			
Public and private networks for urban planning and public transportation.	The public organizations for urban planning and transport are concentrate at national level are specialized in this area. There are not interaction spaces or mechanisms.			The absence of interaction between sectors could disable LVC implementation.

3.3. Quito:

Aspect	Outcome	Competences in urban planning	Competences in public transportation	Enable or disable LVC implementation
LVC Capture instruments	At national and local level are included LVC instruments. However this kind of instruments have not been fully accepted by the public yet.			The legal framework enables LVC implementation.



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Aspect	Outcome	Competences in urban planning	Competences in public transportation	Enable or disable LVC implementation
Political organization	According to the Constitution and to the LOOTGUS the political organization has delivered important competences to the local administrations.	Local administrations could decided on their land management model and applied different planning instruments.	Local administration could decided on: <ul style="list-style-type: none"> - Organization - Location - Routes 	The political organization enables LVC implementation.
Property rights understanding	The legal framework has advance including principle at allows local authorities to impose restrictions to private property rights and also to separate them to the right to build and urbanize.			The concepts around property rights enables LVC implementation.
Urban planning and transportation interaction	The urban planning sector has advanced processes around integration with transportation sytems but public companies as the Metro Quito enterprise has			Urban planning and transport interaction still needs to be strengthen to enable LVC implementation.



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Aspect	Outcome	Competences in urban planning	Competences in public transportation	Enable or disable LVC implementation
	not competences related to this integration.			
Public and private networks for urban planning and public transportation.	The local organization in the public realm could be considered as a complete institutional arrangement.	.		The institutional arrangement enable LVC implementation.



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