LAND VALUE CAPTURE (LVC)

INVESTMENT IN INFRASTRUCTURE

WORLD BANK GROUP

City Resilience Program

GOVERNANCE & SYSTEMS
Institutional resilience and reform

INFRASTRUCTURE
Physical resilience across sectors

FINANCE
Financial resilience and capital market engagement

Three pillars of city resilience

- Infrastructure investment needs beyond the reach of public finances

- Projections show need of $4.1 to $4.3 trillion per year

- Additional $1.0 trillion needed to be climate resilient

- Capital does not flow easily to meet this demand due to lack of knowledge and support from financial services

LVC is a new source of project financing promoted by The World Bank

If there is a $ 1 billion capital investment program contemplated by a city:

- **Traditional Model**:

  - The World Bank finances $100 million with an interest-bearing term loan

  - Another $900 million is raised from general funds, public / private debt and grants

- **Leveraging LVC:**

  - ✓ World Bank – Promotes proceeds from sale of land / development rights, special tax assessments

  - ✓ Reduces **principal of loans and need for additional funding**

  - ✓ Enhances **bankability of projects**

LVC is a financial policy mechanism that helps governments to:

- Finance public investment in infrastructure to redu[ce] physical vulnerabilities thereby unlocking land valu[e]

- Secure (or reimburse) upfront infrastructure fundin[g]

- Levy direct beneficiaries of public improvements, which would otherwise benefit from such improvements as "windfall gains"

- Unlock additional funding in conditions of limited access to traditional sources of public sector financing

- Promote infrastructure cost-sharing

- Incentivize wider policy measures that increase lan[d] value

LAND VALUE CAPTURE

Despite being largely associated with transportation upgrades, LVC opens financing opportunities for many more infrastructure items

Areas with proven track record in LVC

- ✓ Transportation and transit-related assets
- ✓ Water-supply sanitation
- ✓ Sewage and landfill

Lack of LVC track record *but high LVC potential*

- ✓ Flood mitigation
- ✓ Slum upgrades and resettlement
- ✓ Water-basin / land decontamination
- ✓ Environment cleaning and rehabilitation
- ✓ Historic preservation
- ✓ Land consolidation

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1. What are your city's primary infrastructure needs? (Pick top 3)

Flood Control   Seismic retrofit   Urban waterfront redevelopment   Storm water and drainage   Water supply and sewage   Power supply   Airports, ports or train stations   Affordable (social) housing   Roads   Slum upgrades   Solid waste management

Total Results

Example 1: LVC – Ahmedabad Riverfront

30 ha of reclaimed land is for sale

15% of sale proceeds recovers the cost of entire upfront public investment

$17 mln of upfront public investment

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Example 2: LVC – Rio de Janeiro's Historic Bay

New density and height regulations adopted

City earns $1.8B from sale of rights to build extra density

3-4 years to sale of a first tranche of development rights, 15 years to full build out

Regenerated modern mixed-use community

Example 2: LVC – Rio de Janeiro's Historic Bay

Example 3: LVC Park Construction & Economic Development – Tirana, Albania

- Informal settlements removed
- Land rights transferred to neighboring owners
- Landowners benefit from increased density
- Informal settlers can quantify their claims
- City receives revenue and land for park redevelopment

Range of tools used by public sector to capture land value gains

Local taxation	Locally administered tax increments (property taxes, sales taxes) generate additional tax revenues for re-investment in local infrastructure
Special purpose fees	Planning approval fees, user charges, direct financial district funding or infrastructure add-on tariffs
Collaterization of incremental value	Capturing increases in property tax base, and using such Incremental proceeds as collateral source for infrastructure loans
Land exchange or transfer	Swapping land assets or land contributions to facilitate infrastructure
In-kind provision	Infrastructure upgrades financed by private entities as a condition precedent to approval of proposed private development
Leveraging public assets	Disposition of excess/underutilized public assets for cash that is re-invested in local infrastructure

The key distinction between LVC mechanisms lies in the ownership of land

Privately-owned land

- Change of permitted land-use for a fee (cash/in-kind)
- Selling additional density
- Special tax assessments, tax surcharges
- Marked up fees for building permits

Publicly-owned land

- Sale of land that underwent public infrastructure upgrades
- Disposition of land with development conditions
- Swapping land assets / land readjustment
- Sale of land with adaptive reuse requirement

LAND VALUE CAPTURE

Majority of
the land

Small
Share

I don't
know

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Total Results
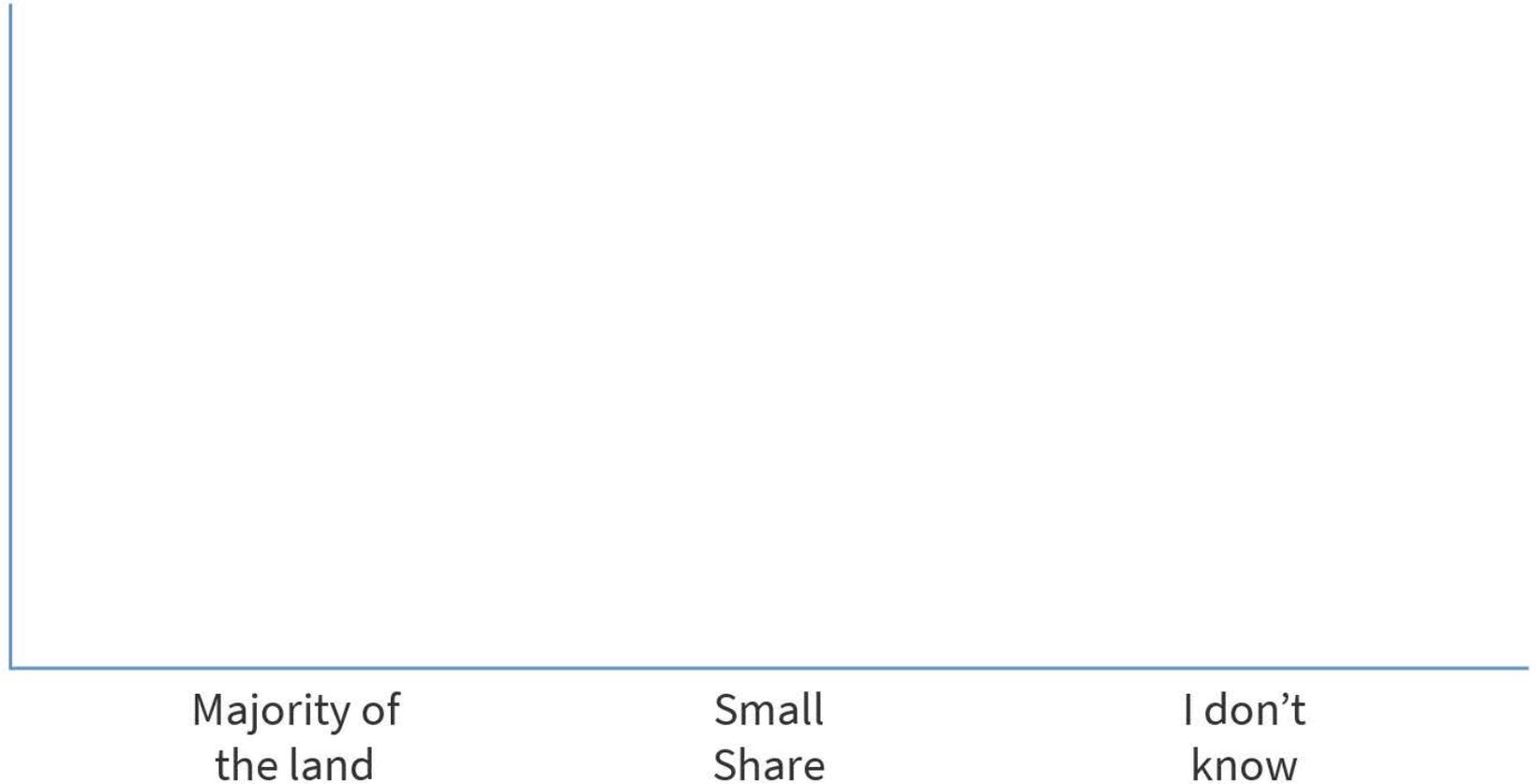
Instruments	Description
Impact fees	Developer / User reimburses pro rata cost of infrastructure
Developer exactions	Developer receives development rights in exchange for obligation to build infrastructure
Betterment levies / special assessment	Public sector taxes / levies fees to compensate publicly funded infrastructure upgrades
Leveraging publicly owned land / property	Disposition/lease of excess public land generates cash for area-wide infrastructure upgrades (also consolidation, expropriation, active municipal portfolio management).
Sale of development rights	Development rights or certificates of additional density are sold for cash to finance infrastructure improvements
Introduction of land value taxes	Levy on value of underlying land "as unimproved" (as a substitute or supplement to property tax levied to buildings).
Tax Increment Financing (TIF)	TIF aims to capture and leverage estimated future revenues from incremental increases in collection of property (or other) taxes within a geographically specified area

3. What land-based financing or land value capture tools does your city currently use (Pick Your Top 3)

Property taxes

Betterment levies (contribucion de valorizacion)

Special assessment districts (or improvement districts)

Tax increment financing

Development charges, impact fees (or other cost recovery mechanism)

Sale or transfer of development rights

Sale or lease of government real property assets

Land pooling / readjustment

Value capture techniques are classified on the nature and timing of charges

Tax-based vs. Non-tax-based

- ✓ **Tax-based**: Betterment levy, TIF, PILOT
- ✓ **Non-Tax-based**: Joint development, exactions, TDR, sale of public land, enhanced use lease

Value capture timing (one-time vs. recurring; upfront vs. upon completion)

- ✓ **One-time charges**: impact fees, density bonus, sale of development rights
- ✓ **Recurring charges**: TIF, land value tax, special assessment zone
- ✓ **Either-or**: joint development

Asset-based vs. Rights-based

- ✓ **Asset-centered**: sale of land, special assessment
- ✓ **Rights-centered**: TDR, density bonus, exaction, betterment levy
- ✓ **Both**: land readjustment, joint development

Sampled ranking of key LVC instruments by level of complexity

difficulty of implementation

Exaction	Cash, land or in-kind contribution by developer
Impact Fees	Upfront one time monetary fee to developer
Leveraging land/development rights	Value capture through disposition of public assets/FAR
Betterment levies	Tax on land value gain from infrastructure upgrades
Tax Increment Financing	Municipal borrowing against property tax gains

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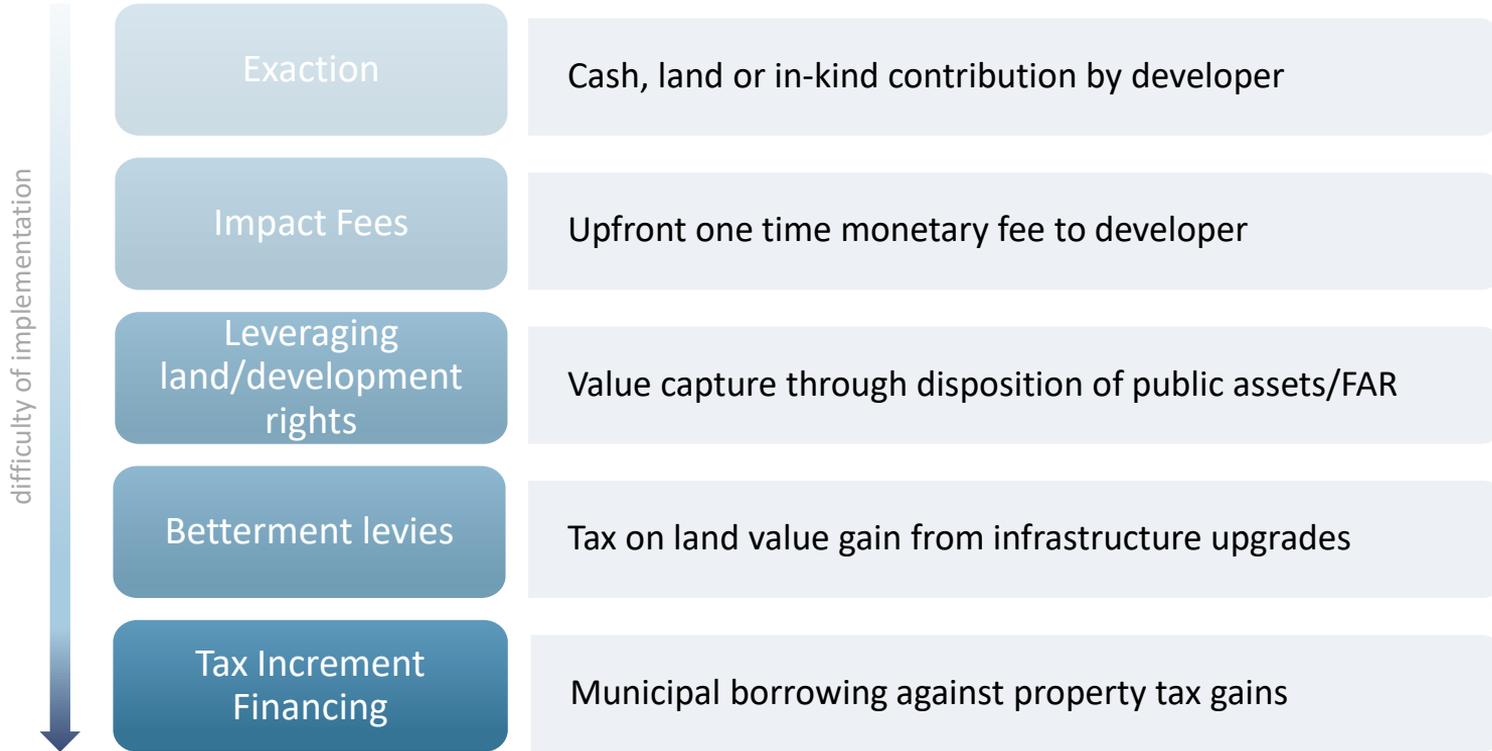
| Market demand | Cadastral data | Zoning or use requirement | Historic or heritage considerations | Market formality | Established property rights | Other |

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Total Results

Relevance of LVC tools may vary depending on the implementation conditions

LVC tools \ LVC Challenges	Unestablished **land market**	Lack **of land use** controls and regulations	Deficient land **Cadaster** / records	Insecure **property rights**	Limited access to **capital markets**	Non-devolved **fiscal powers**
Impact fees / Exactions	🟠	🟠	🟢	🟠	🟢	🟢
Betterment levies	🟠	🟠	🟠	🟠	🟢	🔴
Leveraging public assets	🟠	🟠	🟠	🟠	🟠	🟠
Density bonus	🔴	🔴	🔴	🔴	🟢	🟢
Sale of development rights	🔴	🔴	🟠	🔴	🟠	🟢
Land value tax	🔴	🔴	🔴	🟠	🟢	🔴
Tax Increment Financing	🔴	🔴	🔴	🔴	🔴	🔴

🔴 Prohibitive challenge (regulatory / systemwide changes are prerequisite)

🟠 Significant challenge (regulatory/legislative changes required in certain conditions)

🟢 Limited systemwide arrangements needed. Respective implementation terms can be set at deal level

Relevance of LVC tools may vary depending on the implementation conditions

LVC Challenges / Albania rating	Unestablished **land market**	Lack of **land use** controls and regulations	Deficient land **Cadaster** / records	Insecure **property rights**	Limited access to **capital markets**	Non-devolved **fiscal powers**
Conditions in Albania	🟢	🟠	🔴	🟠	🟠	🟠

Land Market 🟢
- Values well defined
- Good sales comparables
- Defined system for land transfer

Land Use & Regulations 🟠
- Comprehensive plan for central district
- Overall metropolitan area plans lack clarity
- Detailed neighborhood local plans incomplete

Cadaster / Recordation 🔴
- Multiple cadastral / registration programs
- Data quality and confusion

Property Rights 🟠
- Clear protections enshrined in law
- Restitution and de facto claims often at odds
- Some claims resolved at the European Court level

Capital Markets 🟠
- Domestic capital flowing
- No market for international / institutional capital

Local Fiscal Power 🟠
- Limited local power
- Not unusual for capital city of a small country

Size

Permitted Use

Market/Tax value

Title or ownership information

We don't have robust registry
or cadastral database

Key Takeaways

- Understand your legal & regulatory context
- Identify LVC strategies in your cities that can be utilized today
- Continue to enhancing and reform the municipal context to expand LVC options in the future

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