Getting Creative about Revenue Generation: Land Value Capture (LVC) To Help Finance City Resilience
Pace, scale of urbanization requires large-scale investment in infrastructure, access to public services.
Increasing concentration of people, assets in cities increases their exposure and vulnerability to disasters.

“Garbage City” Cairo, Egypt
As policies transfer responsibilities downward, cities are being asked to finance ever-growing demand for infrastructure and services from their own resources.
Cities need to squeeze more value from existing assets, increase return on public investments.
What is “land value capture”? 

✓ Land-based tool to finance urban development
✓ Mechanism to recoup (some portion of) government’s cost of expanding, upgrading infrastructure, public services
✓ Tool to finance public investment in infrastructure that reduces physical vulnerabilities due to floods, environmental degradation, etc, and unlocks land values that city can then ‘capture’
✓ Tool to secure upfront funding for prerequisite infrastructure by borrowing against the anticipated increase in land values (and therefore anticipated increase in taxes collected) that would be catalyzed by such infrastructure upgrades
✓ Promote infrastructure cost-sharing with win-win outcomes to public and private stakeholders
How does land value get created?
Create

Calculate (Estimate)

Capture
Tax base: land, improvements or both?

Assessment method:
- Availability of data?
- How assess value?
- Frequency of assessment

Benefits:
- (Relatively) Efficient to administer
- Predictable source of revenue
- Difficult to avoid (land is immobile)
- Can help reduce speculation
“...Governments should impose higher taxes on the value of land....Land taxes are efficient. They are difficult to dodge... a high tax on land creates an incentive to develop unused sites....

New infrastructure raises the value of nearby land, automatically feeding through into revenues – which helps to pay for the improvements... “
Land-based financing has enabled many types of projects
<table>
<thead>
<tr>
<th>Range of tools: one-time, lump-sum vs ongoing revenue</th>
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<tbody>
<tr>
<td><strong>Impact fees</strong></td>
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<tr>
<td><strong>Sale of public real property assets</strong></td>
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<td><strong>Sale or transfer of development rights</strong></td>
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<td><strong>Land pooling/readjustment</strong></td>
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<td><strong>Betterment levy</strong></td>
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<td><strong>Joint development</strong></td>
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### LVC typically requires new development, robust market

<table>
<thead>
<tr>
<th>Long-term lease of government land</th>
<th>Similar to sale of underutilized public land, except that public sector retains ownership and control while receiving lease revenue</th>
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<tbody>
<tr>
<td>Special assessment district</td>
<td>Tax rates are increased within a geographically defined district that will benefit from the investment(s). Typically requires voter/property owner approval</td>
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<tr>
<td>Tax increment financing</td>
<td>Defined district is designated, although tax rates are NOT increased. Increases in property value (resulting from public action or investment) are securitized, used as collateral to obtain infrastructure loans</td>
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Example 1: Sale of development rights helped finance transformation of Porto Maravilho, Rio de Janeiro’s historic port

- **Underused industrial lands in the historic core of Rio**
  - Low-density uses inherited from cargo port
  - Poor accessibility
  - Environmental contamination
  - Poor transit, road connections
  - Social goals

- **New density and height regulations adopted**
  - City adopted new zoning to allow construction of additional density
  - Structured SPV to sell extra development rights

- **Earned $1.8 B from sale of rights to build extra density**
  - Proceeds directed to hard infrastructure improvements
  - More development catalyzed
  - Attention to social goals, particularly job creation, cultural heritage, inclusion

- **New mixed-use area, with social and cultural assets**
  - 70,000+ new residents at various income levels
  - Major new road, tunnel, transit infrastructure
  - New residential, commercial development
  - Museums, cultural heritage assets

3-4 years to sale of a first tranche of development rights, 15 years to fully build out
Porto Maravilha – Rio de Janeiro
Example 2: Value capture enabled Washington DC to close infrastructure financing gap, catalyze redevelopment of underutilized riverfront

- Blighted, well-located urban riverfront
  - Low density
  - River largely inaccessible
  - No new commercial/retail development
  - Poor road, transit, connectivity

- ~US$200 M of TIF Bonds
  - Competitively selected development partner
  - 99 year ground lease
  - Re-enforced river wall
  - Resettlement of existing houseboat community
  - Road, infrastructure upgrades

- New residential / retail / office / entertainment neighborhood
  - Increase river access to public
  - New promenade, road, bike linkages
  - Phase 1 Opened Oct 2017
  - 10 ha land, 20 ha water (incl 3 new public piers)
  - New civic spaces

- $2B development
  - Convert unused land into active area
  - Job creation
  - New residents while preserving existing community
  - Improve stormwater management
  - Expand property tax, sales tax base

~20 years (vision to plan to development procurement to construction)
The Wharf - Washington, DC

The Wharf (before vs. rendering vs present day)
Land value capture can expand financing options

If city is contemplating a $1B capital investment program:

• "Business as usual":
  ✓ The World Bank finances $200 million with an interest-bearing term loan
  ✓ Another $800 million raised from general funds, debt and/or grants

• Leveraging land value capture tools:
  ✓ In concert with the above, the World Bank can provide comprehensive technical assistance to help attract, structure additional private funding through capitalizing land value (e.g. proceeds from sale of development rights; tax increment financing district)
  ✓ This approach can reduce the principal of interest-bearing loans, general fund appropriations and grant resources and enhances viability of the $1B program
While LVC widely applicable, preconditions apply.
<table>
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<th>LVC tools</th>
<th>Weak Real estate market</th>
<th>Lack of land use controls and regulations</th>
<th>Deficient land Cadaster / records</th>
<th>Insecure property rights</th>
<th>Limited access to capital markets</th>
<th>Limited fiscal powers</th>
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- **Prohibitive challenge** (regulatory / systemwide changes are prerequisite)
- **Challenge but possible** (local regulatory changes, capacity building may be required)
- **Limited systemwide changes needed. Implementation possible in near term**
Land-based finance has broad applicability to help local governments advance economic goals, resilience agenda.