Mobilizing Local Public Resources for Locally-led Climate Resilience

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The following working paper outlines a framework for identifying and evaluating *local* public sources for climate adaptation and other local resilience and social purpose investments. It does so with reference to existing, tested municipal revenue and finance mechanisms. Four mechanisms are highlighted for further application: land value capture schemes, real estate transfer taxes, residential vacancy charges, and special assessment districts.

Given the low (if any) investment returns of adaptation projects, climate adaptation will typically depend heavily upon public funds and finance. The financial resources needed to reduce, respond to, and recover from climate shock events and stresses could be generated through appropriate (re)establishment of taxes, such as the International Financial Transactions Tax, on very high margin, high volume business activities. But with or without such a necessary fiscal reckoning, the climate-related funds currently being established by national governments may increasingly be called upon to manage and recover from a growing frequency of catastrophic climate events. Recent efforts also suggest that they will likely remain inaccessible to many local jurisdictions. Therefore, the full development of subnational and local government finance mechanisms is likely necessary to address both a growing demand and the unique requirements of quality, responsive, locally-led adaptation.

Location-tailored project development involves an array ofplace- andproject-specific stakeholders and property owners. Project components often need to be jointly implementedby them, involving local co-investments and co-management. Projects will also often need to be phased and adjusted over extended periods, beyond the normal engagement spans of central government departments and external private investors, as actual localized exposures to changing climate hazards become clear over coming decades within the micro-climates, -habitats, and -hydrology of each project area.

Ultimately, building true climate resilience within any sizable local jurisdiction will involve scores of distinct local project investments.This will require dedicated capacities in subnational and local governments to manage whole portfolios of adaptation projects, offering opportunities to structure finance on a portfolio basis.

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Private sector innovators and new impact funds are stepping up to the challenge of how to create monetary returns from matching investments in climate risk reduction, and of how to structure adaptation project finance so that investments might offer a reasonable (and competitive) cost of capital for project developers. But given the challenge of extracting near-term monetary returns from reductions of future risks, private finance innovators recognize the need for public if not also charitable contributions within project finance structures.

A general working premise has emerged, therefore, that adaptation projects will generally require 'blended finance' with low- or no-cost capital contributions from the charitable and public sectors structured along with private finance sources to ensure that private return expectations can be met.

BLENDED FINANCE

"Blended finance refers to the strategic use of public sources of capital to attract private investment…Public funds are usually offered on concessional terms, i.e. terms more attractive than the prevailing market conditions, and are used to de-risk investment projects to mobilise additional private capital."

LSE Grantham Research Institute on Climate Change and the Environment, 30 November 2022

Private sector innovators in adaptation finance therefore need also take a direct interest in the development of municipal capacities and finance innovations. The viability of a blended finance approach will often depend upon subnational and local government capital contributions at a lower cost than market rate private capital. The the same time, subnational and local governments, with fiduciary responsibility to their residents, need to make sure that their investment is more than just a subsidy for private investors seeking profitable new market opportunities. The development of public funds for adaptation should also involve 'blended' financial returns to the public or public sector.

Understanding the Needed 'Blend'

As illustrated below in **Figure 1**, responsible local public sector evaluation of potential blended finance structures requires, in the first instance, determination by the local government of how and to what extent it might use one of many public funding and financing mechanisms already at its disposal to finance the project. This may require further authorization and strengthening of these mechanisms.

In the second instance and in parallel, the project developer also needs to determine whether the project can be developed to incorporate revenue generating or other value creating elements (e.g., increased property values) along with the project's targeted risk reduction components.

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A local government or other public sector project developer can only reasonably (i.e., in a fully informed way) and responsibly (i.e., with fiduciary duty to the public) determine the need and terms for private participation in a blended structure after these two considerations are fully evaluated. Even if private investment is necessary, and a blended finance approach is to be taken, the public authority will need to further confirm that the resulting additional public benefits from private participation more than justify the likely higher cost of capital and associated direct and indirect (i.e., opportunity) cost to the co-investing public.

Of course, the ability of a public entity to mobilize and employ any indicated public funding or finance mechanism will vary widely based on the powers and capacities of the local state, on other demands upon public budgets (and related local politics), and upon the strength of local property and business markets as engines of value creation. As will be explored below, access to locally-sourced adaptation funds generally depends upon the ability of local authorities to contribute to the creation of local economic value and to recover a fair 'blended' return from those contributions.

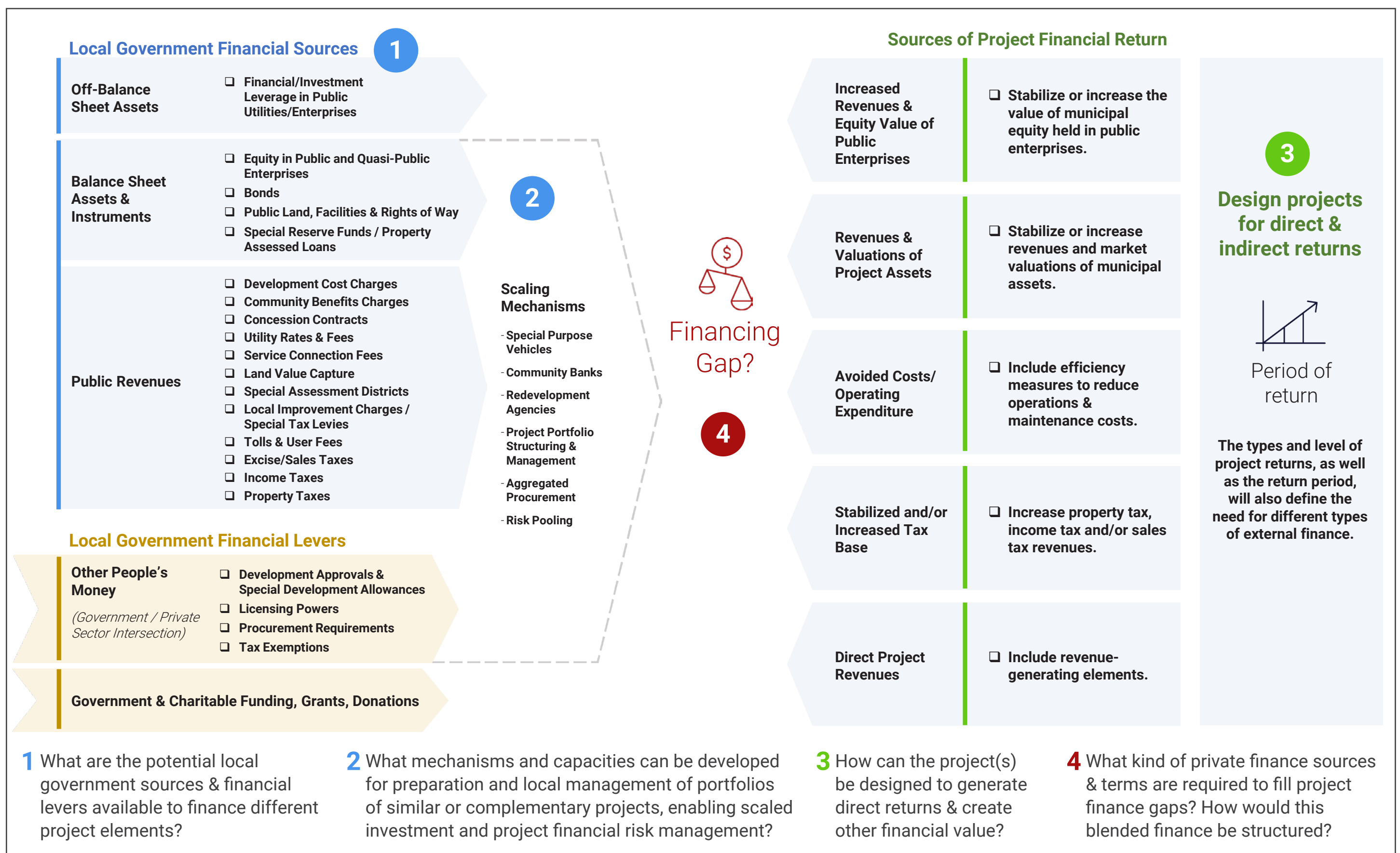

Figure 1. Evaluation of local adaptation finance options. © RESILIENT CITIES CATALYST 2023

The Production and Renewal of Urban Value

The available and appropriate blend of finance for any project will of course vary with project conditions and opportunities. But to build a standing pool of resources for locally-led project preparation and public financial contributions it is worth first identifying potential sources of public revenues that have been underdeveloped or underutilized. Local governments should rightly first ask whether they themselves are recovering reasonable and fair returns from the contributions they currently and conventionally make to develop, maintain, protect, and upgrade local property, business, and industry assets and markets for private users, investors, and enterprise—and related financial returns.

Figure 2 summarizes ways in which local governments contribute to value creation at various stages of the urban (re)development process, from initial land conversion, to servicing and infrastructure and other asset development, to the co-development of high-performance, transaction-rich locations. The figure associates the different funding mechanisms indicated in Figure 1 with those forms of value creation.

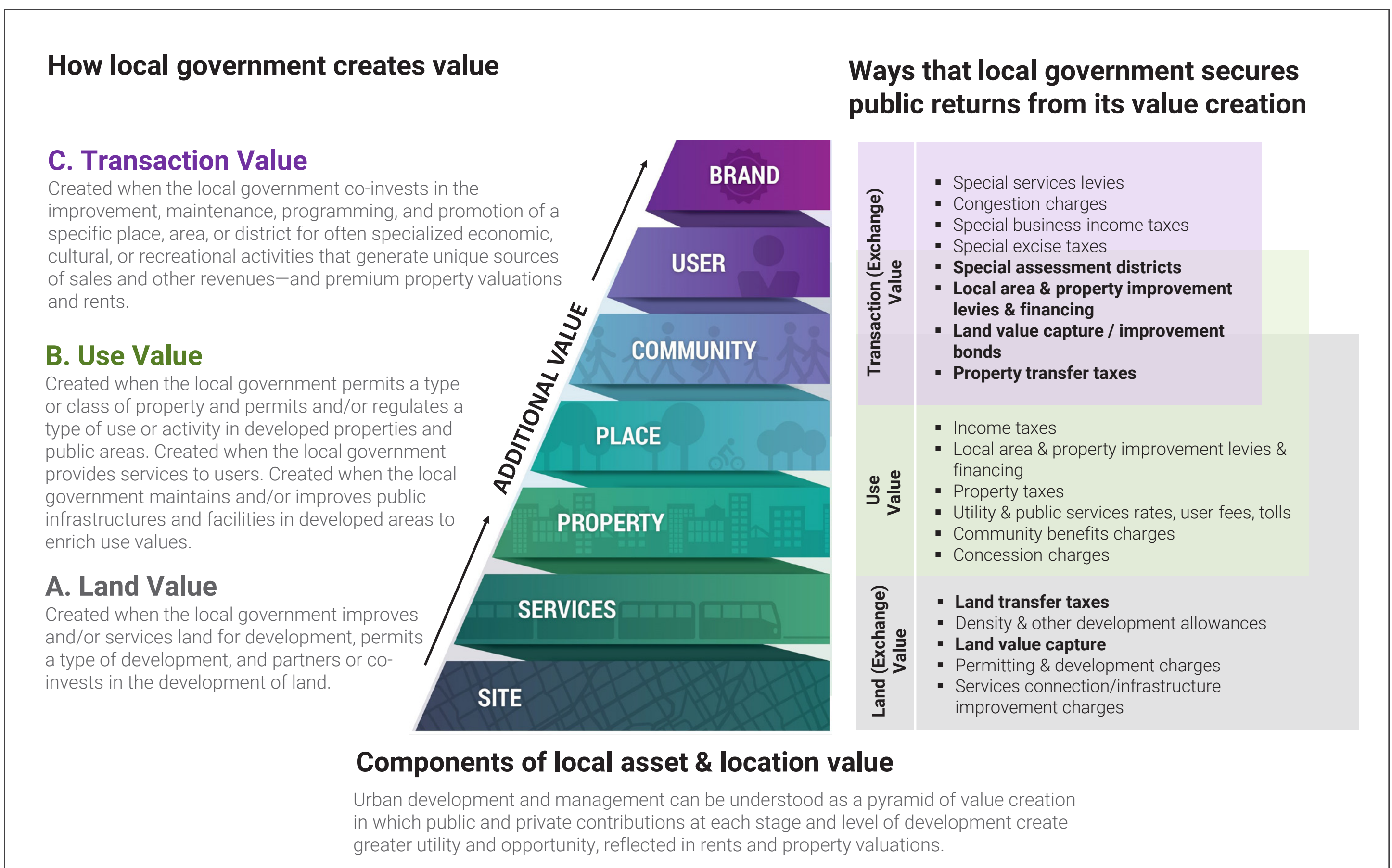

Figure 2. The pyramid of urban value creation. © JEB BRUGMANN / THE NEXT PRACTICE 2015

The utilization of a local funding or financing mechanism involves, among other things, policy justification and equity or distributional considerations. A primary justification for securing a portion of value from any local economic activity or asset is that the local authority is a direct contributor to the creation and maintenance of that value. In many jurisdictions there are two particular areas of value creation where local governments tend not to fully—if at all—utilize tested mechanisms for recovering reasonable and fair returns from the value their contributions.

Developing Local Adaptation Reserves from Property Capital Gains & Transaction Charges

Local governments make very substantial contributions to the creation of initial land or 'site' value at the base of the urban value creation pyramid. In the first instance, their zoning and development control powers determine not only the possible uses of the site but also the full investment return potential of the site. Merely permitting development potential—not to mention 'upzoning', increasing the allowable unit densities on a site or floor area ratio (FAR)—can create enormous value for the property owner.

Statistical studies show that municipal upzoning often produces double-digit landowner windfalls on the value of un- or under-developed land. (FREEMARK 2019; GREENAWAY-MCGREVY ET AL 2018; HAN ET AL 2019) More speculative investors on the peripheries of growing urban regions often take profits without investing in further creation of local use value, even though future development implies future cost burdens on the local government, rate payers, and residents.

RECOGNIZING EXISTING MUNICIPAL FINANCE GAPS

In most local jurisdictions the primary and conventional source of local government revenue collection is associated with the creation and maintenance of use value for local residents and establishments, namely through property taxes and service/user fees for delivery of basic urban services and infrastructure, building and development control, provision of public facilities, protection of ecosystem services and maintenance of green/natural areas, and delivery of programs to support household and community quality of life. Local property owners and residents also contribute to the creation and maintenance of use value.

A primary purpose of adaptation is of course to protect and recover that use value in the face of climate shocks and stresses. However, for most local governments, local funding for such use value investments and operations do not sufficiently cover costs for the maintenance of that value, not to mention for any additional costs associated with these hazards. The likelihood of further utilization of mechanisms like residential property taxes to generate funds for adaptation is therefore low. From an equity perspective, it can be argued that local government accountability to resident-users would involve first ensuring that government is maximizing justifiable revenue collections from its contributions to value creation of non-resident entities.

Landowners may hold those gains as paper gains, avoiding capital gain taxes, but municipalities could recover part of that value in negotiations during the rezoning or development approvals process, and/or through a land value capture mechanism, i.e., via increased property taxes or other assessments after completion of development.

Local governments could also capture further revenues from capital gains and property transactions associated with the rapid growth of now globalized commodity-based investment and trading of property portfolios and related securities, and from other types of speculative property investment that are associated with increased residential unit vacancies in cities with insufficient resident housing supply. As a start, land transfer taxes and vacancy charges can be targeted to these types of property holdings and transactions and used to generate funds for adaptation and other social purposes.

Of course, local governments generally also have considerable property holdings of their own. When strategically managed and effectively developed, returns can also be used for adaptation and other resilience investments.

[The utilization of the above property-based revenue mechanisms can be greatly impeded where local government officials participate alongside private investors in speculative land and development project schemes. The existence of local political collusion in such speculative investments highlights the opportunity cost of insufficient attention given to local government development.]

Where institutionally and politically viable, the above mechanisms could provide a stable source of revenues for building special reserve funds. These, in turn, could be used to support the issuance of municipal or sovereign-backed bonds, offering access to project or portfolio debt finance at a typically lower interest rate than would likely be available via private debt finance.

Special Assessment Districts: Mobilizing Funds at the Top of the Urban Value Pyramid

Local governments are often significant co-investors and co-managers of districts that serve as nodes and magnets of business transaction and consumer/visitor sales. These include central business districts, specialized industry districts (e.g., for technology firms), tourism areas and facilities such as entertainment and sports complexes, and high street commercial corridors. In addition to use value creation and maintenance—for which local governments are already collecting local taxes, utility, and service fees—local

governments also build transaction and asset values in these areas through the issuance of capital improvement and facilities development bonds, by funding special festivals and activities, and through marketing programs. The result is an area of high transaction value that can support collection of a special assessment or further improvement levies to fund necessary climate resilience projects, thus distributing the cost of adaptation to the pool of direct financial beneficiaries operating in the high-value and high-transaction area.

Local governments in many parts of the world already use special levies to fund localized infrastructure improvements. They already co-manage special assessment districts in the form of Business Improvement Districts (BIDs) or Business Improvement Areas (BIAs). Building from these practices, some local governments are now beginning to apply them for district-level adaptation.

The State of California, for instance, has recently provided enabling legislation (SB 852) for the creation of local Climate Resilience Districts. These districts can be formed within a single municipal jurisdiction or across jurisdictional boundaries to develop and operate projects that address sea level rise, extreme heat, extreme cold, and the risk of wildfire, drought, and the risk of flooding. The districts operate under existing subnational rules for infrastructure financing districts. Climate Resilience Districts can levy a benefit assessment, a special tax, a property-related fee, or another kind of service charge for these purposes. Districts are required to prepare an annual expenditure plan, an operating budget, and a capital improvement budget to be adopted by the district's governing body. The new legislation draws upon an innovative precursor initiative, the Sonoma County Regional Climate Protection Authority, and now grants the Authority fuller financing authority and powers as California's first Climate Resilience District.

Credit: Sonoma County Regional Climate Protection Authority

‘Blended’ Distribution of Returns from Urban Development: A Key Principle for Co-investors

Alongside private sector innovators, subnational and local governments are also innovating in the use of existing public revenue and financing mechanisms to address emerging climate risks and other critical social needs. The results and pace of innovation on both fronts will ultimately determine the nature of blended finance structures for different kinds of climate resilience projects. As potential blended structures are being evaluated, the following general principles on the appropriate blend of finance sources and distribution of returns from adaption projects and urban development investments might be applied, reflecting both private and public contributions and interests.

1. In the public interest, subnational and local governments should seek to generate or access the lowest cost project finance available. This will often be public finance and require innovative applications of public revenue and finance mechanisms. Private finance advisors and companies (e.g., underwriters, re-insurers) can make important contributions by aiding the development and use of such mechanisms.
2. The more that a private investment in an urban asset or place generates use value and benefits for local residents and communities—the more that public interest is served—the greater the returns that can fairly be accrued to the private investor.
3. The less that any private urban property or development investment adds to use value and benefits for local residents and communities—or if and when the private investment reduces local public use and benefits—then the greater the portion of any value created that the local public sector should capture to address those local, public needs, such as climate risk reduction.

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