Land and property taxes: Exploiting untapped municipal revenues

Paul Collier, Edward Glaeser, Tony Venables, Priya Manwaring, and Michael Blake

This brief outlines the importance of annual land and property tax as a source of municipal finance and explores trade-offs that policymakers face in implementing reform. It also identifies examples of best practice for reform from cities across the developing world.

For cities to become engines of growth and structural transformation in developing countries, coordinated public policy is needed, both to provide the connectivity that makes cities work, and to tackle the potential downsides of density. Implementing these policies is expensive. The problem for many cities is that the necessary public investments that enable urbanisation to become a force for sustained economic growth are constrained by limited revenues of local governments. As urban populations in sub-Saharan Africa and South Asia rapidly grow, demands on public investment will only continue to rise.

In this context, annual taxes on land and physical properties represent the largest source of untapped municipal revenue for developing cities. Alongside their potential to raise significant public revenues, these land and property taxes are also fairer and more efficient than other forms of tax. Their limited use stems from the fact that land and property tax reform often faces significant political resistance from owners of these assets, and designing or reforming land and property tax systems can require substantial investment in technical and staffing capacity. At each stage of the design of a land and property tax system, policymakers can make decisions to harness the benefits of annual land and/or property taxation whilst addressing these associated challenges. Even modest investments in reform to land and property tax systems can help dramatically expand municipal revenues to enhance public service and infrastructure provision.

Key Messages

 Policymakers should prioritise the taxation of land and immovable property to enhance city revenues.

Alongside their potential to raise significant public revenues, land and property taxes are also fairer and more efficient than other forms of tax.

2. What to tax, what assets are exempt from taxation, and what rates to set are crucial policy decisions.

Policymakers face trade-offs that will have to be made within each of these in reforming or introducing land and/or property taxes.

Policymakers can learn from success stories across developing cities.

These successes show that relatively minor reforms to land and property taxes that address political and administrative challenges can dramatically expand municipal revenues.







Four reasons policymakers should prioritise the taxation of land and immovable property

1. Land and property taxes can yield substantial revenues for governments

Local governments in many developing cities are constrained by limited revenues to carry out the necessary public investments that enable urbanisation to become a force for sustained economic growth. In this context, land and physical properties represent the largest source of untapped municipal revenue. Broad ownership of these assets means that taxing them can raise significant public revenues which, if designed appropriately, can increase per capita income growth in a city. For example, it is estimated that a 1% tax on land and property in Kigali could generate over \$60 million per year under full tax compliance¹. In Lagos, reforms to property taxes under governors Tinubu and Fashola that have been implemented since 1999 have helped the state to increase public revenues from taxes five-fold to over \$1 billion in 2011².

2. Taxing land and property is fairer than other forms of tax

When local governments invest in building a road, or a school near a property, the price of this property significantly increases. In Accra, for example, properties that benefit from public investment in tarred roads and concrete drains are 1.8 times more valuable that those without³. At the same time, prices of land and property in a city are increasing all the time due to urban population growth that places higher demand on land. Taxing land and property is therefore fairer than other forms of taxation, as it allows governments to capture some of these increases in land and property prices that result from forces outside of the owner's control and are in part the direct result of public investment. If designed appropriately, those individuals who gain more from public services and population growth can be taxed for the benefit of the wider community

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3. Land and property taxes can provide a self-sustaining return on investment

Related to this, annual land and property taxes can allow governments to obtain returns on their investments in public services and infrastructure that raise the value of nearby land and/or property. These taxes enable a virtuous cycle where appreciating urban land and property values finance the public investments which make the city more productive.

Implementing annual land and property taxes therefore provide governments with credible future income streams on the basis of which it may be possible to finance current projects through capital markets. Reforms to these taxes can complement policies to improve land value capture through one-off betterment fees and land transfer taxes that can help to initially finance public investment.

4. Land and property taxes are more efficient than other forms of taxation

The fixed supply of land in a city means that taxing this asset does not negatively affect urban investment and instead encourages efficient land use by incentivising owners to use their land more productively, unlike taxation on land and property transactions that can limit the sale of land and property towards their most efficient use. The OECD finds that taxing land and property, though less efficient than taxing land alone, is less harmful to investment and growth than other taxes such as income and corporate tax⁴.

Policy decisions in reforming land and property tax

There are three main decisions policymakers will need to take in reforming or introducing land and/or property taxes:

1. What exactly to tax?

Policymakers can choose to tax the combined value of land and immovable properties, land alone, or immovable properties alone. The value of immovable property alone is determined by owner investment in these structures, whilst the value of land is determined by factors such as location, surrounding public services, and population growth. These two values are often combined in property sales. In order to capture value that is publicly, rather than privately created, policymakers will therefore need to tax land alone, or land and property together. In Tanzania, for example, only the value of immovable properties is taxed, whilst in Rwanda, Malawi, Zambia, and Botswana, the value of land and property are both taxed separately. In Lagos, three different rates on land and property have been consolidated into one land use charge.

There are a number of potential benefits of taxing land alone. Most importantly, given its fixed supply, a tax on land will not negatively affect urban investment. At the same time, taxing land can encourage landowners to use their land more efficiently by raising the cost of holding underdeveloped land. Taxing land at a high enough rate may therefore reduce urban sprawl and speculation, making land more affordable for productive uses. High levels of land taxation, alongside lower taxes on productive sectors, have reduced land speculation and encouraged manufacturing investment in many East Asian countries⁵.

Certain practical considerations may mean that taxing land and properties together is the best option for policymakers. One is the availability of data to isolate land sales. If there is insufficient data on transactions of land and property, or on the current value of buildings alone, it is difficult to isolate the separate values of land or property. It may therefore be easier to value and tax land and property together. Taxpayers are also far more likely to understand a tax system based on the composite value of land and property because they are likely to be more aware of the market value of the two assets combined.

In addition, taxing land on its own can be more regressive if rich and poor landowners own land of similar value but with very different structures on the land. Taxing these two groups at the same rate would either raise limited resources from the rich, or be unaffordable to poor landowners, forcing them to give up their land. This can prevent mixed-income neighborhoods from emerging in more central urban areas by forcing poorer owner- occupiers off their land. In order to avoid this, policymakers can choose to implement a tax on the composite value of land and property.

2. What assets are exempt from taxation?

A major factor affecting revenues from land and/or property taxes is whether or not exemptions are introduced, which can be based on land or property use, value, or ownership. Such exemptions should be carefully considered because in a number of African cities, exemptions to land and/or property tax systems are a significant source of revenue loss⁶. Exemptions to land and/or property tax can be divided into five main groups:

- i) Those based on socially desirable land and/or property use, such as schools and hospitals;
- ii) Those targeting owners with lower value assets in order to reduce inequality, based on the value of land or properties;

- iii) Those targeting owners who would not be able to afford to remain on their land/property if taxed based on its value, e.g., low income households;
- iv) Those given for political reasons, such as owner-occupancy exemptions to garner political support from homeowners;
- v) Exemptions for government-owned properties and nonprofit enterprises.



Land used for schools are often exempted - School in Kigali, Rwanda (Photograph: Brian Dolinger)

There are benefits to implementing land and/or property tax exemptions. The first three types of exemptions outlined above can be useful in achieving different goals for urban development. At the same time, exemptions to low value land/and property may be sensible if administrative costs outweigh potential revenues. Low-income exemptions may also be necessary in the short run, to reduce political resistance to reforms that displace low-income groups without alternative living arrangements.

There are also significant downsides, as experienced in many developing cities. A well-functioning tax system is one that applies a low tax rate across a broad tax base. Exempting some properties from the tax base does not reduce overall demand for public investment in services and infrastructure, and therefore either reduces tax intake or places a higher tax burden on all other individuals.

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In addition, by introducing any kind of exemption, land and property tax systems are made more complex. This creates the opportunity for fraudulent behavior. Exemptions for owner-occupancy, for example, can be exploited by owners of multiple plots of land by dividing ownership titles among family members to avoid taxation. With greater complexity comes greater administrative burdens on local governments to monitor and evaluate requirements for exemptions. As such, any attempts to increase the range of exemptions should be carefully weighed against administrative capacity to monitor qualification for such exemptions.

3. How to set land and property tax rates?

Setting a tax rate is a difficult political decision since it has to weigh the need to raise municipal revenues against the ability of taxpayers to pay. The level of tax rate(s) will depend on the tax base, tax revenue collection aims, and affordability for taxpayers. Given the tax base, and how much a government aims to raise from land or property tax, a tax rate can be established – as long as it satisfies affordability constraints for taxed individuals.

Tax rates across the world

Land and property taxes across Europe and in the US are typically set somewhere between 0.5-1% of market value per annum⁷. In East Asian countries such as China and the Philippines, property tax rates are approximately 1-2% whilst annual property taxation in South Korea is levied between 0.15 and 0.5% of property values⁹.

In many sub-Saharan African countries, high tax rates are applied to outdated asset values – in Kenya, for example, land taxes range from less than 10% to over 30% ¹⁰. In other countries, however, rates can be much lower; in Rwanda, taxes on land and buildings under freehold titles are set at only 0.1% of asset values ¹¹.

The affordability of land and/or property taxes depends on a range of factors, such as taxpayers' incomes, other taxes levied on land and/or property, such as capital gains tax, and other taxes more generally. Given that a house is typically seen as "affordable" if it is 2-3 times the owner's annual income¹², it is possible to roughly estimate landowner incomes using data on property values and calculate what percentage of incomes would go towards any particular tax rate.

In many developing cities, different rates are often applied to land and property based on whether they are used for residential, commercial, or industrial purposes. At the same time, tax rates are sometimes differentiated by area if there are certain public services that only benefit particular areas in a city¹³.

Variable tax rates can be beneficial in a number of cases. Higher tax rates on vacant or underdeveloped land alone, for example, can be key to **reducing land speculation**, where land is bought by investors as a short-term investment with no intentions to develop it. In Gaborone City in Botswana, for example, land tax rates on underdeveloped plots are four times higher than on developed plots, in order to discourage speculation and encourage rapid development¹⁴. Policymakers may also want to capture a greater proportion of the value of **residential properties** that generally make greater use of public services and infrastructure than non-residential properties.

However, introducing variable tax rates can, like exemptions, increase complexity of the tax system, and raise associated administrative costs in its implementation. Differentiating between types of land/property or their values substantially increases the data requirements, increases the opportunity for error in judgement, and face similar administrative challenges as implementing exemptions. In addition, the more complex the system of tax rates, the more difficult it is to communicate the system transparently to taxpayers. If administrative capacity is low, a single rate may be the best option for policymakers.

Best practice for land and property tax reform

At each stage of the design of a land and property tax system, policymakers can make decisions to harness the benefits of land and/or property taxation whilst addressing associated administrative and political challenges.

1. Use existing tools and occupancy data to expand the registered tax base

In order to develop or broaden the tax base, up-to-date physical and legal 'cadasters' that document information on the features and ownership of all plots and immovable properties are critical. These cadasters are often developed by local authorities when undergoing a process of land rights formalisation. However, in many developing cities, land and property cadasters are seriously outdated and incomplete, resulting in a significant loss of municipal revenue from land and property taxes due. In this context, there are a number of minor reforms which can significantly expand the registered tax base. For example, using existing tools such as geographic information systems (GIS), digital maps, and aerial photographs to identify plots of land and the structures on these plots can allow for physical cadastering to be done at a much quicker pace than by traditional methods of official site visits. At the same time, where legal cadastral surveying identifying land ownership is not possible, data collection on occupancy can form the basis of a land/ and property tax base.

A city that has successfully implemented such reforms is Hargeisa, Somaliland. Here, land ownership registration was virtually nonexistent in 2005 after years of conflict. Limited revenues from property taxation were insufficient to cover even essential municipal services. With assistance from UN-HABITAT that included on-the-job training for local staff, the local government in Hargeisa developed basic cadasters using satellite data and surveys to collect data on physical characteristics of properties and the occupier(s) of those properties. Over eight months between 2004 and 2005, properties registered for taxation increased from 15,850 to 59,000. Alongside changes to implement a more complex valuation process and automate property tax billing, this new system of taxation increased revenue by 248%¹⁵.

2. Use valuation methods appropriate to administrative capacity

There are a range of methods for land and/or property valuation, including capital market value assessment, rental value assessment, area-based assessment, and proxy-based assessment. Tax valuation based on capital market values is the most accurate way of capturing the true taxable value of land and property, but administratively, it is extremely demanding. It requires significant data on market transactions of land and property, data on the contents and characteristics of plots, and the capacity to estimate land and property values based on existing data. In order to accurately reflect market values, it also requires frequent revaluation. The success of such complex tax value assessment across local governments in South Africa and Namibia has been largely based on mature real estate markets, adequate local resources, and substantial valuation assistance and training from provincial authorities ¹⁶.

By contrast, area-based tax value assessment offers the simplest form of standardised assessment of land and/or property. Many developing countries have adopted this system as a temporary method of valuation. In Ethiopia, Mozambique and in several states in Nigeria, for example, municipal governments raise taxes based on the size and location of buildings. This system has increased transparency of the tax system and made it easier to administer for local governments¹⁷.

Reforms to enhance valuation capacity, including investments in software, model development, and technical staff training, can yield significant returns in higher revenue capture in the long run. However, designing valuation systems to meet administrative capacity is extremely important for governments in many developing cities. For example, after the civil war in Sierra Leone, Freetown, Bo, Makeni, and Kenema city councils moved from more complex valuation methods to simplified area-based assessment. A transparent system of property valuation based on construction type, structure, location, and accessibility enhanced the legitimacy of new local government structures whilst allowing these local authorities to increase local revenues by over 300% between 2007 and 2010¹⁸. The share of local government revenue from property taxes in Bo, Makeni, and Kenema increased from 8.5 to 23% between 2006 and 2011.

3. Automate billing and payment systems

Automation of billing and computerised payment systems can be key to improving tax collection by allowing for efficient monitoring and collection of payments and reducing opportunities for corruption. In Arusha, property tax collection is done through an electronic revenue collection system that updates to show compliance when taxes are paid and a receipt is generated. This updated revenue collection system, launched in December 2013, has allowed the city to expand its property tax revenues, raising Sh174.5 million in its first three months, as compared to Sh84 million in the five months before the system became operational¹⁹.

4. Link taxation to public investment

Public support for land and property tax reform is critical for its success. If reforms are closely linked to tangible benefits, they are more likely to be accepted. In particular, if land and property taxes are closely linked to public expenditure on things like roads and hospitals, they can become seen as the legitimate price paid for public services and infrastructure.



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Lagos, Edo Turn To Land, Property Tax To Shore-up Revenue



Highly visible and popular investments in infrastructure such as road improvements funded by property taxes have transformed Lagos City (Photograph: Clara Sanchiz)

Surveys in Lagos, for example, suggest that greater levels of tax compliance are linked to the belief from taxpayers that their taxes have been well spent, which is largely the result of visible, costly, and popular infrastructure projects such as road improvements. In Governor Fashola's first term in office, annual capital spending in Lagos rose from \$600 million in 2006 to \$1.7 billion in 2011 (in inflation adjusted 2012 figures)²⁰. These investments played an important part in Fashola's continuing popularity and re-election.

To be successful in raising public support for taxation, efforts to raise awareness among a broad base of citizens of this link between land and/or property tax, public investment, and long term urban development is important. For example, in Lagos, public signs to educate citizens about the benefits of paying taxes were placed at public works sites²¹. Further to this, a tax stakeholder forum was also organised for representatives of local communities, private firms, religious leaders, as well as formal and informal labour organisations to discuss their responsibilities towards a land and property tax. This coincided with a roll out of public investment in infrastructure and transport to illustrate swift delivery of government promises in these discussions²².

References

- ¹ Sally Murray, Mihaly Kopanyi, and Patrick McSharry, "A Land Value Tax for Kigali: Analysis and Policy Considerations" (IGC, 2016).
- ²Edward Paice, "Lagos Proves Africa's Property Tax Potential," *The Africa Report*, 2015; World Bank, "World Bank Consumer Price Index Data," Accessed 2017; Olasunkanmi Akoni and Gbenga Akanmu, "Lagos Assembly Approves N450.8bn Budget for 2011," *Vanguard News*, 2011, http://www.vanguardngr.com/2011/01/lagos-assembly-approves-n450-8bn-budget-for-2011/.
- ³ Kwasi Gyau Baffour Awuah et al., "Benefits of Urban Land Use Planning in Ghana," *Geoforum* 51 (2013): 37–46, doi:10.1016/j. geoforum.2013.09.019.
- ⁴OECD, *Tax Policy Reform and Economic Growth* (OECD Publishing, 2010), http://dx.doi.org/10.1787/9789264091085-en.
- ⁵ Mihaly Kopanyi and Sally Murray, "An Effective Property Tax Regime for Rwanda (Draft Report)" (IGC, 2016).
- ⁶ Washington H A Olima, "Property Tax Regimes in East Africa" (UN-HABITAT, 2013).
- ⁷Kopanyi and Murray, "An Effective Property Tax Regime for Rwanda (Draft Report)."
- ⁸Global Property Guide, "China Capital Gains Tax Rates, and Property Income Tax," Text, *Global Property Guide*, (2013), http://www.globalpropertyguide.com%2FAsia%2Fchina%2FTaxes-and-Costs; Global Property Guide, "Philippines Capital Gains Tax Rates, and Property Income Tax," Text, *Global Property Guide*, (2016), http://www.globalpropertyguide.com%2FAsia%2FPhilippines%2FTaxes-and-Costs.
- ⁹Global Property Guide, "South Korea Capital Gains Tax Rates, and Property Income Tax," Text, *Global Property Guide*, (2016), http://www.globalpropertyguide.com%2FAsia%2FSouth-

Korea%2FTaxes-and-Costs.

¹⁰ Kopanyi and Murray, "An Effective Property Tax Regime for Rwanda (Draft Report)."

11 Ibid.

- ¹² Murray, Kopanyi, and McSharry, "A Land Value Tax for Kigali: Analysis and Policy Considerations."
- ¹³ Richard M. Bird and Enid Slack, "Land and Property Taxation: A Review.," in *Paper Presented at the World Bank Land Workshop, April 3–6, Budapest, Hungary.*, vol. 19 (Citeseer, 2002), http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.203.2450&rep=rep1&type=pdf.
- ¹⁴ Alosyus Mosha, Challenges of Municipal Finance in Africa: With Special Reference to Gaborone City, Botswana, Human Settlements Finance Systems Series (Nairobi: UN-HABITAT, 2010).
- 15 Walters, "Land and Property Tax: A Policy Guide."
- ¹⁶ Nara Monkam and Mick Moore, "How Property Tax Would Benefit Africa" (Africa Research Institute, 2015).
- 17 Ibid.
- 18 Ibid.
- ¹⁹Loy Nabeta, "Building Arusha: One City's Journey to Better Urban Services, Access and Quality of Life," World Bank, 2014, http://www.worldbank.org/en/news/feature/2014/08/12/building-arusha-one-citys-journey-to-better-urban-services-access-and-quality-of-life.
- ²⁰ Diane de Gramont, "Governing Lagos: Unlocking the Politics of Reform" (Carnegie Endowment for International Peace, 2015).
- ²¹ Paice, "Lagos Proves Africa's Property Tax Potential."
- ²² de Gramont, "Governing Lagos: Unlocking the Politics of Reform"