Considerations for a commercial property tax in Ethiopia

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Overcoming data limitations in relation to commercial properties:

- While mass appraisal works well to save data costs for residential properties, it is less accurate for commercial properties due to their heterogeneity.

- Existing national surveys do not specify how much of rental income is commercial, nor capture characteristics of commercial properties owned. A low-cost way of accessing this data is by administering it through surveys.

- Other administrative data that could be considered include construction permits, rental and sales data for real estate brokers, and personal and corporate tax return data.

Considerations for focussing on commercial property tax:

- Commercial properties are often levied at higher rates, are more likely to comply, and less politically sensitive than residential properties.

- However, taxing commercial properties more creates multiple challenges, such as market distortions, given they rely less on public services, are more price sensitive and mobile, and can pass on the tax to customers through higher prices.

- Focussing on improved administration, sensitisation, and overcoming vested interests for taxing all properties may be a more efficient solution in the long run.

Introduction

Ethiopia has been urbanising rapidly over the last decade, with the capital city, Addis Ababa, expanding by more than 9,000 hectares between 2002 and 2010.[1] Furthermore, the real estate sector grew by an average of 14.1% in recent years, far above the national GDP growth rate.[2] However, the country, just like many others in the continent, is not adequately capturing the gains of this rapid urbanisation.

Property taxes have been touted by numerous organisations as a fair and efficient way of doing this. While globally they tend to make up around 2 percent of GDP, in Africa they often make up less than 0.5%. There is thus great potential to expand this as a source of revenue.

There have been various attempts in Ethiopia to modernise the property tax system, including large-scale data collection efforts as well as establishing a special project office within the Ministry of Urban Development and Construction. Most recently, a property tax proposal has been drafted by the Ministry of Finance that aims to increase revenue by levying a tax rate of 0.5% to 2% on business hub areas using market valuation of capital value estimated by registered surveyors. It is anticipated that this tax will finance 60% of the local government budget.

This note aims to highlights key considerations for this new commercial property tax proposal. The first section gives an overview of property tax in Ethiopia, including recent property tax reforms and the results of a recent simulation on increased property taxes. The second section highlights key considerations for a commercial property tax. The third section looks at innovative ways that institutions have overcome data limitations, including (i) simplifying the valuation method, (ii) automating the process, and (iii) using alternative data sources. And finally, the fourth section concludes by looking at the fundamental issues of property tax administration, compliance and overcoming vested interests.

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[1] Atlas of urban expansion
[2] Goodfellow, T. (2017). Taxing property in a neo-developmental state: The politics of urban land value capture in Rwanda and Ethiopia, *African Affairs*, Volume 116, Issue 465, Pages 549–572, https://doi.org/10.1093/afraf/adx020

Overview of property tax in Ethiopia

All land in Ethiopia is owned by the state, providing numerous ways in which rapidly rising land values can be captured. The property tax system currently in effect is known as the 'roof tax' or 'city house tax' or 'taria gibir' in Amharic which relates to buildings. Land rent or 'meret gibir' was split out separately as after land was nationalised in 1974, as this could no longer be taxed as a state resource. Both were brought into effect through the tax proclamation no. 80/1976.[3]

Roof tax

The roof tax value is calculated based on the annual rental value of the property: 1% for houses with an annual rental of ETB600 to 4.5% for those with an annual rental more than ETB6000. The tax rates are set by the national government, in consultation with local governments, but collected at the local level. Exemptions have been given to government institutions, religious charitable bodies, and properties with an annual rental value less than ETB 300.

To date, the revenues generated through the roof tax system are very small, at ETB 57 million (USD1.4 million), only 7% of the municipality tax revenue in Addis Ababa, and almost negligible when state revenues are included as well.[4] In comparison, in 2018/19 Kampala property taxes were USD 113 million, and 36% of total OSR, or 14% of the total city budget. This is largely due to the outdated property registries which do not capture the accurate values or exponentially growing number of properties in the city, but also because of poor compliance and enforcement mechanisms, as well as low rates of taxation. As a result, the taxes are not increasing with increasing property values, meaning much of the gains of urbanisation are not being captured by the public sector for re-investment in critical infrastructure.

Land rent

Land rent is calculated on the size and location of the plot. The plot location has three grades, and each grade has different values depending on whether they are used for residential or commercial purposes, with commercial tenants paying significantly more.

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[3] Goodfellow, T. (2015) Taxing the Urban Boom: Property Taxation and Land Leasing in Kigali and Addis Ababa, ICTD Working Paper 38, Brighton: Institute of Development Studies
[4] Gebrewolde, T. & Molla, K. n.d. Property Tax for Urban Development: A micro-simulation analysis for Ethiopia. IGC report (forthcoming).

Land rents account for much more of the budget, at ETB 2.7 billion in 2018/19.[5] There is a dual system in place – a permit system, which yields very low revenues far from the market value, and a leasehold system with minimum price benchmarks and auctions to determine a fair price. As a result of this system, two similar parcels of land in the same area could differ in rent by a factor of 50.[6] Since 2011, the permit system is being phased out, with each new transfer of land having to move towards the leasehold system, significantly increasing city revenues (land rents had risen by 125% in Addis Ababa by 2015[7]). However, given that urban land is finite, and that land leases do not capture the value of buildings and improvements, there is an ongoing need to reform the property tax system.

Property tax reforms

The government has recognised the need to overhaul and modernize the system, establishing a special project office within the Ministry of Urban Development and Construction. Objectives include exploring data collection, different valuation methods and rates.

A major census of all properties was conducted in 1996 in order to update the registry of both formal and informal properties, as well as their value using location and building characteristics. However, the tax bill was 75% more than what was previously being pad and therefore there was extremely strong resistance to this, causing the government to revert to the original valuations. Despite this, revenues increased from ETB 4 million to ETB 50 million simply due to increasing the number of properties on the register.

In 2009, the Addis Ababa City Administration (AACA) tried again, putting out a tender to update property registration rolls, the land cadastre, and a street addressing system.[8] The contractors used aerial photography to map 360,000 parcels of land and 1.15 million building or construction features. However, several years later the cities property registration is still incomplete. Ethiopia's Central Revenue Authority is now charged with collecting these taxes, subject to improved performance of AACA.

[5] Gebrewolde, T. & Molla, K. n.d. Property Tax for Urban Development: A micro-simulation analysis for Ethiopia. IGC report (forthcoming).
[6] Goodfellow, T. (2017). Taxing property in a neo-developmental state: The politics of urban land value capture in Rwanda and Ethiopia, *African Affairs*, Volume 116, Issue 465, Pages 549–572, https://doi.org/10.1093/afraf/adx020
[7] Carolini, G. Y., Gelaye, F., & Khan, K. (2020). Modelling Improvements to Property Tax Collection: The Case of Addis Ababa.
[8] Carolini, G. Y., Gelaye, F., & Khan, K. (2020). Modelling Improvements to Property Tax Collection: The Case of Addis Ababa.

Simulation of property tax potential using national surveys

A micro-simulation done previously by the IGC[9] aims to analyse the potential of introducing a more up-to-date property tax system in Ethiopian urban areas. Using data from the Ethiopian Socioeconomic Survey (ESS) and Household Consumption Expenditure Survey (HCES) on household characteristics, rental incomes and ownership information to impute values, finds that a 2% property tax on imputed rental income of owner-occupied urban houses will generate 579.3 million ETB, increasing the income tax and total tax revenue by 1.18% 0.33% respectively, and is somewhat regressive. To make it more progressive, the authors also explore imposing a 15% tax on rented out properties where owner-occupiers are exempted – but this yields much lower overall revenues to the government. These should be taken as lower-level estimates, given the tendency for people to under-report incomes in wealth in surveys.

Taxing commercial property

As mentioned above, a recent property tax proposal has been drafted by the Ministry of Finance that aims to increase revenue by levying a tax rate of 0.5% to 2% on business hub areas using market valuation of capital value estimated by registered surveyors. It is anticipated that this tax will finance 60% of the local government budget. Commercial property in Ethiopia makes up a significant proportion of the higher value building stock, and construction of commercial buildings has increased significantly over the past few years.

While residential properties usually make up the largest component of properties in a given city, commercial, industrial and institutional properties are also important sub-groups to consider. Furthermore, they tend to have different characteristics and incentives, which need to be considered. Focussing on commercial properties, certain trends are frequently observed:

- Commercial properties have often been found to be **more likely to comply** than residential counterparts. This is likely due to the fact that large businesses are more easily identified, and a smaller sub-set to target for enforcement. In Kampala, commercial properties were 19 percentage points more likely to comply than residential ones.[10]

- Commercial property taxes are often **levied using different methods and at higher rates**. In the US, on average, commercial properties

[9] Gebrewolde, T. & Molla, K. n.d. Property Tax for Urban Development: A micro-simulation analysis for Ethiopia. IGC report (forthcoming).
[10] Manwaring, P. & Regan, T. (2020). Enhancing Property Tax in Kampala: Successes, challenges, and next steps for increasing municipal revenue. IGC policy brief 43448.

have an effective tax rate that is 64% higher than residential.[11] There are three primary valuation approaches for commercial property:

- o The cost approach – estimates the cost of replacing it.

- o The market approach – compares the property to other, similar properties price it accordingly.

- o The income approach – the present value that reasonably supports the current rental payments net of expenses.

- Commercial property tax is often **less politically sensitive,** making it easier to reform.

Despite this, theory shows that commercial properties are in fact not a good tax for local governments to focus on, for both ethical and distributional reasons[12]:

- **Commercial entities rely less on public services** than do residential counterparts, frequently making their own arrangements for waste removal and infrastructure. Viewing property tax as a payment for value created by the local government, this means that commercial properties should be paying less, not more.

- **Businesses are more price sensitive and mobile**, and therefore are more likely to relocate as a result of heavy taxes. A tax on business value is therefore less distortionary than a business property tax.

- Higher taxes on commercial properties may also **divert investment** away from it in favour of residential, distorting the property market.

- The tax incidence is likely to simply be passed on to the consumer through **higher prices for goods and services**. Customers might not be residents from the same area, and therefore in effect those residents are paying for public services they do not use.

While the higher tax rates combined with the higher likelihood of compliance means commercial property often contributes far more revenue than residential.

Focusing on taxing commercial properties, rather than widening the residential tax base, should be done with caution given the distortionary effects and the long-term implications.

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[11] https://www.lincolninst.edu/sites/default/files/pubfiles/50-state-property-tax-comparison-for-2017-full_1.pdf
[12] Slack, E. (2011) The Property Tax – in Theory and Practice, IMFG Paper on Municipal Finance and Governance, Toronto ON: Institute on Municipal Finance and Governance, Munk School of Global Affairs, University of Toronto: 2, https://munkschool.utoronto.ca/imfg/uploads/173/enidslack_imfg_no._2_online.pdf

Overcoming data limitations

While property tax might be efficient and fair, it is also a 'data-hungry' tax which makes is financially and administratively costly to implement.[13] Successful implementation of a property tax requires identification of the location and boundaries of that property, who owns it as well as its value or property attributes. In contexts with fully functioning land and property markets, up to date land cadastres and formal addressing systems, this information is relatively easy to come by, enabling government agents to easily identify properties for valuation, billing and payment collection.

However, in many developing countries the formal property market is under-developed, there are no property registries, cadastres are out of date, if available at all, and the complexity of tenure systems leaves many parcels unregistered. As with the census in Ethiopia in 1996, the data required for property taxation is carried out through specific data collection efforts - manual updating of property registers by registered surveyors and valuers. These are incredibly expensive and time consuming – money that many local governments don't have. A number of developing countries have thus shifted to a new approach of simplifying the valuation method, automating the process or finding alternative data sources to approximate market values, as explored below.

Simplifying the valuation method

The key aim of an ethical and efficient property tax is to link tax assessments to the availability and quality of public infrastructure and services in that neighbourhood. Therefore, where the data for market-based valuation is not available, simple and fit for context solutions are often used instead. These include area-based valuation - simply using a location factor or band, and the floor size of the property, or points-based valuation, where certain housing attributes, such as construction materials and access to certain public goods and services are used to approximate the value.

Although these methods have proven to match market valuation trends relatively well, they are more regressive given the reduction in individual variance within a particular area. Area based and points-based systems can progress to market-based systems over time, as more characteristics are added and as zones or bands become smaller and more nicely defined. They also allow governments to include ratings on informal areas – a large proportion of many African cities - where no market information would have been present.

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[13] McCluskey, W., Franzsen, R., Kabinga, M., & Kasese, C. (2018). The Role of Information Communication Technology to Enhance Property Tax Revenue in Africa: A Tale of Four Cities in Three Countries.

Automating the process

The automation of property tax assessment reduces both the requirement for data as well as the capacity to implement, making it more efficient and cost effective. Computer Aided Mass Appraisal (CAMA) uses data points on select property characteristics as a basis for extrapolating relative market values, replacing the need for widescale market valuation in the future. This is because only a small proportion of actual values are needed to calibrate an update to all property values. Furthermore, digital systems can be linked – with property registries automatically updating when new building licences are issued, or when demolitions take place. However, commercial properties have proven more difficult to assess and are less amendable to methods of mass valuation given their heterogeneity.

Finding alternative data sources

1. Leveraging existing national surveys

In many countries, national governments already collect relevant data through the census, national household surveys, or income and expenditure surveys. This includes information on housing characteristics, such as dwelling-type, roof type, ablution facilities, and access to certain amenities which can be used to impute residential property values. Information on rental income is also reported, this rental income could be from a range of assets, including both residential and commercial properties. Leveraging these existing surveys and tailoring the information collected to meet the requirements for property tax evaluation could enable policymakers to greatly reduce the overall cost of data gathering.

2. Other administrative data sources

These include construction permits to understand where new properties have been built, rental and sales data from real estate brokerages, and rental or bond repayment information collected for personal or corporate tax returns. All of these would include information on the value of both residential and commercial properties, however, would be limited to the formal sector.

3. Satellite data

High resolution satellite imagery allows one to identify all properties in the city, as well as estimate building footprints and heights, to update existing tax maps. Furthermore, GIS locations have in many cases also been used to overcome the lack of formal addressing, helping tax officials to better identify properties, and ultimately helping to build towards a more formalised system.

A study in Kigali looks at whether satellite imagery can be used to classify building types and how they have changed over time, including commercial and

industrial buildings, as described in the Kigali case study on the next page.[14] Cadastral data was used in some cases to help in ground truthing the information, but this could also be done through local experts. One limitation is that satellite imagery does not help in seeing whether high rise buildings are commercial, residential or mixed. In Karachi, Pakistan, this difficulty is overcome with a separate tax for commercial signboards.

Another study in Kigali shows how this satellite data can be combined with land prices, and data from population and housing census, and administrative data on infrastructure locations, made it possible to use the CAMA method to value properties.[15] Over and above combining this information with property valuations to set property taxes, this data can be used to make decisions on infrastructure provision and building regulation on building supply and density.

A recent simulation done in Addis Ababa uses satellite imagery to shows the potential of area-based collections where the valuation method changes by area in order to better link taxes to infrastructure provision.[16] Here, buildings are identified as residential or commercial only by using the rudimentary measure of the height of the building. Other data included construction permits, real estate brokerage permits, rental and sales data from realty brokerages, night light emissions, geolocations of sewerage lines, road networks from open street map.

[14] Bachofer, F. & Murray, S. (2018). Remote sensing for measuring housing supply in Kigali. IGC final report 38418.
[15] Ali,D., Deininger, K., & Wild, M. (2018). Using Satellite Imagery to Revolutionize Creation of Tax Maps and Local Revenue Collection.
[16] Carolini, G. Y., Gelaye, F., & Khan, K. (2020). Modelling Improvements to Property Tax Collection: The Case of Addis Ababa.

Classifying building types using satellite imagery in Kigali

A spatial dataset was produced that contains each building footprint and typology in 2009, and each building footprint and typology in 2015, and the change over the period.

The images were obtained from aerial images taken in 2008/9, and from the Pleiades stereoscopic satellite for 2015 which were of a much higher quality. The higher quality images collected for 2015 meant that a semi-automated process could be applied to identify the building footprints and typologies, with manual correction needed for 15%- of the buildings that were not correctly classified using the automated approach. The following typologies were distinguished.

Mostly residential

1. Rudimentary: small, single family dwellings that are low rise and constructed of very basic building material. They are often in very dense and unplanned areas.
2. Bungalow: Detached or semi-detached and terraced building patterns, often with a gabled roof and greenery and/or courtyard.
3. Villa: Large detached building and large property with high quality construction materials. Often with complex roof structures and greenery/courtyard.

Mixed use

4. Local apartment: multi-storey/multi-unit apartments with more than two units. Buildings often have a lack of maintenance and local architecture. Largely residential but commercial or public use is also possible.
5. Modern apartment: Multi-storey/multi-unit apartments with more than three unites. Largely residential but commercial or public use is also possible.
6. Outbuilding: small, rundown, non-residential building.

Mostly commercial

7. Local building: small buildings with one to three floors. Local architecture of densely built-up compound or block structure. In most cases these had a commercial usage, and often found in the CBD or on high density roads.
8. Hall: non-residential, rather mostly commercial (market) or industrial (warehouse) usage with a large ground floor area greater than 100 square metres.
9. Special: mostly public, cultural, commercial or industrial usage such as religious buildings, power plants and refineries.

Policy recommendations

Many studies over the last 40 years have pointed to the fact that gathering the right data will not solve the property tax conundrum on its own. Rather, administration and compliance seem to be where things fall over– including ongoing management of data, lack of transparency and communication, lack of systematic billing and collection practices and low levels or ability to enforce.[17] Furthermore, even where some cities get this right, it is ineffective without political support. The latter is challenging and requires strong leadership to overcome strongly held vested interests.

While efforts have already been made in Ethiopia to systematically gather data for updated property registries, this has not resulted in prolonged or substantial increases in revenues due to strong resistance of the public – even though the proposed tax rate is comparatively low at 2%. The people feel they are already being heavily taxed with the recent change in the land rental system from permits to leasehold.

This suggests that more needs to be done in terms of sensitisation and compliance – a key ingredient for success in other cities like Kampala as described in the box on the next page. Another key aspect is more visibly linking tax payments to services delivered. This, combined with simply broadening the number of properties captured in the registry, will achieve a lot in terms of increasing the revenues derived from the roof tax. Incremental increases in property valuations can then be done slowly over time – as service delivery improves, trust is built, and vested interests are overcome.

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[17] McCluskey, W., Franzsen, R., Kabinga, M., & Kasese, C. (2018). The Role of Information Communication Technology to Enhance Property Tax Revenue in Africa: A Tale of Four Cities in Three Countries.

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Citizen as a Client, Kampala[18]

The 'Citizens as a Client' approach has transformed the way the KCCA approaches tax collection and service delivery. The city is trying to build their relationship with communities around a shared understanding of their respective responsibilities, i.e. the city to deliver high-quality services, and the citizen to pay their taxes. The goal is to provide more information to citizens and make applications and payments much more convenient in the hope that this will better incentivise taxpayers to comply. Given the high costs of enforcement, encouraging voluntary compliance is a far more sustainable solution, and has been enshrined in the development of the KCCA citizen charter.[19]

Some of the strategies used include:
• Decentralising revenue collection centres to make payment more accessible;
• Automation and diversification of payment methods and making services available online through the e-Citie portal;
• Creating a 'one-stop-shop' where people can get all their required services seen to and processed in one visit;
• As mentioned above, involving the people responsible for providing citizens with information in designing and implementing new systems and processes, so they can provide advice from first-hand experience;
• Establishing a Large Taxpayer Office for the people responsible for the majority of fees and taxes, providing special services to encourage compliance.

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[19] Humphreys, M., Bosancianu, C., Garcia-Hernandez, A. and Silver, I. (2019). Developing Kampala's citizen charter: Citizen deliberation and bureaucratic responsiveness in service provision. IGC Project Report