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Literature Review

The Progress, Problems, and Potential of Property Taxation in sub-Saharan Africa: A Review of the Literature

Wilson Prichard, Colette Nyirakamana, and Graeme Stewart-Wilson

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In putting together this literature review, we have drawn directly from several previous ICTD publications, including using common text and paraphrasing, to produce the best possible summary and review of the existing evidence.

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Acronyms

CAMA	Computer-Assisted Mass Appraisal
DRC	Democratic Republic of the Congo
GDP	Gross Domestic Product
GIS	Geographic Information System
GPS	Global Positioning System
IT	Information Technology
LUC	Land Use Charge
LVD	Land Valuation Division
NIC	Neighbourhood Improvement Charge
OECD	Organisation for Economic Co-operation and Development
SNG	Subnational Government

Introduction

Recent decades have seen increasing attention paid to local governments as the drivers of development outcomes in lower-income countries. Greater local government autonomy is expected to improve government efficiency by moving decision-making closer to those most affected by the decisions (Faguet 2014). Property taxes are a key mechanism empowering local governments to achieve development goals. In some countries, property taxes are administered entirely at the central government level, while in others they are fully decentralized. In most cases, property tax administration is a responsibility shared between local and central governments. Regardless of the administrative arrangement, property tax revenues are typically used to fund service provision by local governments. Currently, however, across much of the continent, property tax revenue collection has not kept pace with the decentralization of expenditure responsibilities (Bird 2010). Subnational revenue collection—whether administered centrally or locally—rarely comes close to meeting the budgeted expenditure needs of local governments.

International experience suggests that when countries decentralize more expenditure responsibility than revenue, either service levels fall or local governments are forced to press for more transfers from central governments, financial assistance from international donors, or more loans (Bird and Vaillancourt 1998).[1] There is a strong case for a significant degree of tax autonomy at the subnational level to help fill this revenue gap. Local-level tax autonomy gives subnational governments greater freedom in responding to citizen needs, while also being a potential driver of engagement with taxpayers, improving both accountability and responsiveness (Besley and Coate 2003; Weingast 2009). Despite this emerging case for subnational tax autonomy, revenue mobilization at the local level is often very weak in lower-income countries. As shown in Figure 1, subnational governments in high-income countries typically raise about 30 per cent of total public revenue directly. Their counterparts in low-income countries raise less than 8 per cent (Smoke 2019). As a result, local governments in lower-income countries tend to be highly reliant on central government transfers and donor funding to meet their revenue needs.

Figure 1 Subnational government revenue by country income group (OECD-UCLG sample of 95 countries)[2]

SNG expenditure	Low income	Lower middle income	Upper middle income	High income	All 95 countries
% of GDP	1.7	6.3	8.3	13.2	9.0
% of public revenue	7.5	20.3	25.1	29.7	23.9

In sub-Saharan Africa specifically, the weakness of subnational revenue collection rests on a range of direct and indirect causes. Local revenue administration in many jurisdictions is characterized by high levels of arbitrariness, coercion, and corruption (Fjeldstad and Therkildsen 2008; Fjeldstad, Chambas, and Brun 2014). In general, levels of tax compliance in sub-Saharan countries are quite low—especially in places where residents do not feel that they receive requisite levels of services for the taxes and fees they do pay (Fjeldstad and Heggstad 2012b). Local governments raise revenues from a base defined by the central government, and they tend to levy whatever taxes, fees, and charges they can within those constraints—often without worrying too much about the economic distortions or negative distributional effects they may create. Local revenue raising thus often has a distortionary effect on the resource allocation decisions of firms, and in many cases places a

[1] Local government revenues are made up of local taxes, transfers from central governments, and financial assistance from donors. However, empirical evidence shows that central government transfers and donor aid occupy a larger portion of budgets, as compared to locally generated revenue.
[2] Figure adapted from (Smoke 2019, 9).

disproportionate burden on the poorest segments of the population (Pimhidzai and Fox 2012; Fjeldstad 2015). In short, in many sub-Saharan jurisdictions local revenue raising is largely antithetical to the goals of development and poverty reduction. Despite many comprehensive central government tax reforms across the continent during the last two decades, local government revenue systems in sub-Saharan Africa have remained largely unchanged until recently (Fjeldstad 2015).

In sub-Saharan Africa, local governments raise revenue from a variety of sources, including property taxes, business licenses, poll taxes, market fees, and various user fees. All these taxes and fees, except for property taxes, tend to be regressive and distortionary while raising only limited revenue. Business licenses, for example, are often applied at relatively flat rates to different types of businesses and thus effectively impose a heavier burden on smaller and lower-income firms (Fjeldstad and Heggstad 2012a). Market fees also tend to fall disproportionately on small and itinerant traders, who are often low-income women (Akpan and Sempere 2019; Ligomeka 2019; Prichard and van den Boogaard 2017; Sempere 2018; Siebert and Mbise 2018). Poll taxes are similarly regressive, which has led to their abolition in many, but not all, countries (Bakibinga, Kangave, and Ngabirano 2018; Fjeldstad and Therkildsen 2008). Despite booming real estate markets (especially in capital cities), property taxes in much of the continent remain a marginal source of revenue (Fjeldstad, Ali, and Goodfellow 2017).

Of all the ways that local governments currently collect revenue, property taxes present the best opportunity to improve their finances, while simultaneously resolving many of the challenges related to equity and economic distortions outlined above (Moore, Prichard, and Fjeldstad 2018). Economists have long argued that a recurrent tax on property is the best local tax because it is fair, it is a tax on immovable assets, and it is less distortionary than other taxes (Norregaard 2015). A recurrent property tax can be assessed and collected in several different ways, including as a simple per-unit fee, or as a tax on the assessed value of a property. When assessed as a simple per-unit fee, the amount may vary based on the location of the property or type of building (Franzsen and McCluskey 2017c). When based on the assessed value of a property, property taxes can be levied as a flat rate, or adjusted based on the value of properties, as in the case of progressive property tax rates (such as in Port Louis, Mauritius) (Franzsen and McCluskey 2017a, 278). In some countries, these approaches are combined, such that properties registered in the valuation roll are taxed based on their assessed value, while those not in the valuation roll are charged a flat fee. Many countries also employ a minimum property tax fee, with rates increasing thereafter for more valuable properties (such as in Tanzania) (Franzsen and McCluskey 2017d).

To the extent that wealthier people own more valuable properties—which tend to be larger and situated in more desirable locations—the property tax is likely to be progressive and consistent with principles of equity. The degree of progressivity, however, will differ depending on the specificities of the property assessment that is used. Because properties are immovable, the property tax is—at least in principle—difficult to evade. Properties cannot shift location in response to the tax and cannot be hidden. These characteristics should make it somewhat easier to levy and collect property taxes than other taxes at the local level (Slack 2011). Finally, property taxes are thought to be the least harmful form of tax, as they have the smallest negative impact on individual and firm economic decisions compared to most other taxes. The OECD, for example, has ranked tax types in order from most to least efficient: property tax, VAT, personal income tax, and corporate income tax (OECD 2010, 10).

Beyond these economic benefits, the highly visible nature of property taxes can also promote accountable governance, as citizens that are asked to pay more taxes may monitor the performance of elected officials more closely through the public services they provide (Gadenne 2017; Slack 2011). This potential reflects the high salience of property taxes and the ability to draw explicit links between revenue raising and service provision at the local level (Gadenne 2017). Yet, in practice, surveys make clear that taxpayers often have very low confidence that revenues will be translated into broader benefits. Large surveys from Ghana and the DRC, for instance, indicate that taxpayers have very little confidence that governments use tax revenue to effectively deliver services (Paler et al. 2017; Prichard and van den Boogaard 2017). Qualitative evidence suggests this belief is common elsewhere in the continent (Prichard 2017). Because the wider development benefits of property taxation are as much about strengthening accountability as they are about raising additional revenue, it is particularly critical that reform programs incorporate strategies to strengthen public engagement. As well as improving broader development outcomes, incorporating such strategies is likely essential to building the kind of public trust and political support necessary for reforms to succeed in raising additional revenue.

Property taxes thus have several potential economic and political benefits that could help local governments in sub-Saharan Africa capture more of the expected benefits of decentralization. Despite these potential benefits, property taxes are chronically under-collected on the continent. In higher-income countries, property taxes almost universally provide the backbone of local government finances. According to the IMF's World Revenue Longitudinal Data,[3] property tax as a share of GDP can reach as high as 2 per cent or more in higher-income countries (M. Ali, Fjeldstad, and Katera 2017). Data from lower-income countries is incomplete, but suggests that property tax collection often accounts for less than 0.2 per cent of GDP (M. Ali, Fjeldstad, and Katera 2017). Even in countries where local governments have the legal authority to raise their own revenue, there has been only limited improvement in property tax collection in many years (Smoke 2019). Of all the major national and subnational taxes, the recurrent tax on property is the most severely underperforming in lower-income countries. If property tax collection in lower-income countries were to approach the levels seen in higher-income countries, it would dramatically transform the finances of local governments and substantially expand the possibilities for accountable local service provision.

We can usefully think of poor performance as having both technical and political roots. Technically, there is a growing body of evidence highlighting the often-dysfunctional policy, administrative, and institutional characteristics of property taxes. These dysfunctions often reflect systems inherited from the colonial period that are poorly suited to the needs of lower-income countries today (Olima 2010). That same literature has begun to point toward new models and opportunities for improved performance (Fish 2018). On the political side, the literature suggests that often what appear to be technical challenges actually reflect deeper political resistance to reform that makes implementing these new models and opportunities difficult (Eaton, Kaiser, and Smoke 2011). A broader political economy analysis is thus essential to understand the opportunities for—and limits to—technical reform priorities.

The purpose of this literature review is to take stock of the progress, problems, and potential of property taxation in sub-Saharan Africa. It asks: (1) what are the reform possibilities within different stages of the property tax cycle? (2) what are the primary challenges facing reform opportunities on the continent? and (3) what strategies can governments use to improve compliance and increase public support for property tax reform? The role of information technology (IT) in property tax reform is addressed in all three sections. Long hailed as a powerful solution to improving property tax collection in sub-Saharan Africa, IT reforms have rarely achieved their promise on a sustainable basis. There are both technical and political roots to the disappointing performance of past IT reforms—but, as will be argued, what often appear as technical challenges are in fact a reflection of deeper political resistance to reform.

[3] Available here: http://data.imf.org/revenues

The first section reviews the entire property tax cycle and summarizes the evidence on technical reforms to address each stage of the cycle. The second section discusses the major challenges to reform, which are primarily political in nature. Resistance to reform is likely to emerge out of the relationship between central and local governments, from within local administrations themselves, or from taxpayers—and in particularly the economic and political elite. The third section turns to the challenges of strengthening property tax compliance and broader political support for reform. Compliance, at its core, relies on a relationship of trust between citizens and their local governments. This trust can be strengthened through education, improving procedural fairness, reducing space for harassment, improving equity, making linkages to service provision clearer, and providing greater accountability.

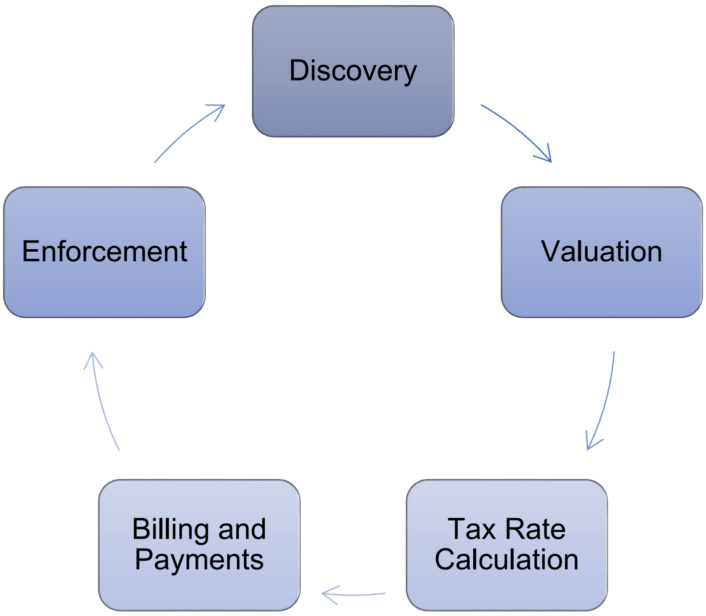
1 The property tax cycle

In thinking through the various stages of the property tax cycle, it is useful to keep in mind the basic elements of the formula that contributes to subnational property tax revenue:

Tax revenue = (registered tax base – exemptions) x taxable value determined by assessment x legally defined tax rate x tax collection and enforcement measures[4]

That is, each property must be identified and registered (except those properties exempted for policy reasons), and their value must be assessed through an established methodology. The tax rate, defined in policy by the appropriate level of government, is then applied to the assessed value of properties, and tax demand notices are delivered. The taxing jurisdiction must then effectively collect the revenue owing and credibly punish defaulters in some way. The following sub-sections will address each stage of the property tax cycle and outline the main conceptual and practical challenges of each.

Figure 2 The typical property tax cycle



[4] Adapted from (Collier et al. 2018)

1.1 Discovery

The starting point for any property tax system is ensuring that all taxable properties are captured in the valuation roll. Discovery generally encompasses two interlinked processes: identification and measurement. Properties must be identified on a map, and, ideally, their area needs to be measured. Measurement is necessary because it typically plays a central role in establishing the assessed value of properties (discussed below). Although discovery is a basic precondition for effective property tax collection, in practice property tax rolls are often highly incomplete. It is not uncommon to observe jurisdictions with a coverage ratio (that is, the number of properties in the registry divided by the total number of properties) below 30 per cent. In some countries, the coverage ratio may be as low as 10 per cent (Kelly 2000). Low coverage ratios reflect the fact that local officials often lack the capacity, or the political will, to develop a system for mapping all properties in their jurisdiction that is updated on a regular basis (Kitchen 2012; Kelly 2012).

For locations in which the existing valuation roll is extremely incomplete, building a new property roll generally requires some combination of technology and manual ground-truthing. The balance between the two is dictated by local costs, administrative capacities, and the characteristics of the local government environment. In recent years, three broad strategies to balance these approaches have emerged: satellite imagery, drone images, and manual identification. Hybrid approaches seek to balance the relative costs and advantages of these different strategies against each other.

1.1.1 Satellite imagery

In some environments, it may be possible to rely almost entirely on satellite imagery to identify and map properties within a given jurisdiction. Even simple tools like Google Maps have sufficient resolution to identify individual properties. In general, satellite images are more useful for discovery in dispersed settlements. In dense urban environments, it becomes more difficult to distinguish individual properties from each other, especially when rooflines are overlapping (Stewart-Wilson Forthcoming). Additionally, while satellite imagery can generally capture building footprints, identifying the number of stories is more challenging, and likely requires some level of manual ground-truthing to complement the discovery process (Carolini, Gelaye, and Khan 2020). Some satellite imagery providers now offer services that aim to automate the identification and measurement of properties.[5] Satellite images from succeeding years can also be compared to automatically detect new construction and building extensions. In the absence of automation, identification and measurement can be achieved manually using satellite imagery and geographic information system (GIS) software. While more time consuming, such a manual GIS process can also be more accurate, depending on the capacity level of the technicians.

1.1.2 Drone imagery

An alternative to satellite imagery, which has been piloted in some African jurisdictions, is to rely on drone photography. The Humanitarian OpenStreetMap Team, for example, has used drone imagery to construct detailed maps of flood-prone areas in Dar es Salaam, Tanzania (ReliefWeb 2016). A proof-of-concept case study in Kigali, Rwanda, also demonstrated that drones can be used to create and update high-definition, relatively cost-effective property maps (Koeva et al. 2018). Rwanda also recently hosted the African Drone Forum to encourage the development of innovative business models enabled by drone technology (ADF 2020). The technical capacity and financial resources necessary to use drone images are likely higher than for satellite imagery (Ruwaimana et al. 2018). But drone images have higher resolution and greater clarity, making identification and measurement easier, especially in dense urban environments. Drone images can also be used to measure the height and broad characteristics of properties, further increasing their accuracy (Koeva et al.

[5] See for example: https://www.maxar.com/products/building-footprints

2018). In sum, the use of drone imagery in property discovery for tax purposes in Africa is still at a very early stage of development, but presents intriguing technical possibilities, and is being encouraged aggressively by some national governments and donor agencies.

1.1.3 Manual identification

Manual property identification is still the common practice used by most local governments in Africa. Where satellite or drone imagery is impractical, unfeasible, or too expensive, jurisdictions continue to rely on the manual enumeration of properties. Under manual identification strategies, surveyor's typically go door-to-door measuring properties, recording a unique identification number for the property roll, and noting relevant property characteristics. More sophisticated manual identification strategies rely on GIS coordinates to identify and map properties, perhaps using handheld devices (Grieco et al. 2019). Even in jurisdictions that use satellite or drone imagery for discovery, some level of manual surveying may still be necessary to identify properties with mixed domestic and commercial uses.

1.1.4 Hybrid approaches

The most appropriate solution in many contexts likely involves some hybrid combination of the above strategies for discovery. For a recent reform of the property tax system in Freetown, Sierra Leone, for instance, enumerators visited each property in the city to identify their coordinates on a digital map (Grieco et al. 2019; Stewart-Wilson Forthcoming). Those coordinates were then matched to a satellite image, from which roofline measurements were determined. Manual identification avoided the high error rate from relying on satellite imagery alone in dense urban environments, although it was significantly more cost-efficient to measure properties with satellite images rather than directly in the field. The most appropriate combination of these strategies might look quite different where the technical capacity to correct automated satellite imagery is higher, where patterns of urban settlement are less dense, or as image quality and technology improve. While these approaches outline some broad possible strategies for discovery, the specific solution is likely to look somewhat different in each context.

1.1.5 Assigning discovery responsibility

In many countries, the function of identifying and mapping properties lies with the central government rather than with local governments (Mikesell 2012). Discovery is often part of the broader responsibility for overseeing land use, land titling and construction. As a result, in many countries, the process of developing a property roll may be subsumed within the broader—and significantly more complex and politically contentious—process of titling and registering land. As the comparatively simple task of identifying all properties for tax purposes is delayed by conflicts over land titling, the rollout or updating of property registries has been significantly derailed in many countries (Goodfellow 2017a). A lack of central government resources for, or interest in, identifying properties for taxation by subnational authorities has also contributed to delays (Mikesell 2012).

The alternative to central government-led property discovery is for local governments to take responsibility for developing and maintaining their own property rolls. Shifting responsibility for discovery in this way essentially unlinks property taxation from the process of land titling and avoids many of the associated institutional hurdles. Subnational officials are only responsible for identifying taxable properties, and not for determining valid ownership credentials (Martinez-Vazquez and Rider 2008). The main benefit of this taxation-led strategy for property discovery, as opposed to a titling-led strategy, is that it can circumvent the major and persistent challenge of land titling in Africa (Moore and Monkam 2016; Kelly 2014; Bahl, Martinez-Vazquez, and Youngman 2008). Local governments may also have stronger incentives to ensure the completeness of their own property register, and delegating this responsibility to local governments may contribute to greater accountability of local government officials to their residents (Martinez-Vazquez and Rider 2008).

The main downside of assigning property discovery functions to local levels of government is that it can present challenges when they do not have the necessary technical or financial capacities. In Kenya, for instance, property discovery was delegated to the county level, and different counties experienced widely divergent outcomes, largely dependent on pre-existing levels of administrative capacity (Wanjiru, Maina, and Stewart-Wilson 2019). In sum, a pragmatic and flexible approach to the assignment of discovery functions is needed. Some contexts would benefit from a more localized approach, while others may benefit from greater centralization of the process, or from more constructive forms of mutual collaboration. The correct formula in any given location likely depends on the various trade-offs inherent to the existing institutional structure and political context.

1.2 Valuation

Once properties have been identified and registered, their taxable value needs to be assessed to determine the final tax bill to charge property owners. As the property tax is a recurrent tax on the assessed value of properties, this process is core to any successful property tax system (Zebong, Fish, and Prichard 2017). However, unlike other taxes that are based on the explicit value of financial flows like income or sales, property taxes are generally based on the estimated value of fixed assets like buildings or land. Property sales and rental data are often not easily observed, and transactions may be infrequent. As a result, effective valuation has been notoriously difficult, even in developed countries. In England, for example, Council Tax (a form of property tax levied on domestic properties) valuations have not been updated since 1991 (GOV.UK 2016). In lower-income countries, under-valuation is often dramatic. Valuation ratios, which divide the assessed value by the real market value, are often on the order of 10 to 25 per cent (Bahl 2009).

In some cases, even conceptualizing the “value” of a property is difficult, especially outside of capital cities. In the more developed urban property markets it should, in theory, be possible to establish the market value of properties (Zebong, Fish, and Prichard 2018). In peri-urban or rural settings, where property markets are almost non-existent, the idea of a “market value” is largely theoretical. There may be no realistic possibility of selling the property, for instance, due to the absence of demand, contested or unclear land titles, or communal land holdings (Zebong, Fish, and Prichard 2017). Such challenges can create sharp disagreements about the appropriate valuation for tax purposes, and in some cases a large discrepancy between the notional market value of a property and taxpayers’ actual ability to pay.

In many countries, laws inherited from the colonial period dictate that property valuation must only be carried out by the central government, or by a professionally-certified cadre of valuation officers (Olima 2010). Such valuation officers are often supplied by the central government, but there may be a severe lack of qualified personnel relative to the volume of work required (Bakibinga and Ngabirano 2019). With the implementation of New Public Management reforms, some local governments are now able to outsource the valuation function to private firms or individuals. In Kenya, for instance, the counties are allowed to contract out property valuation, although final approval of valuation rolls is provided by the Ministry of Lands (Nyabwengi, K’Akumu, and Kimani 2020). However, securing the services of sufficient valuation officers—even when relying on the private sector—can become enormously expensive, and often far exceeds the resources available in lower-income jurisdictions (Moore, Prichard, and Fjeldstad 2018). The lack of sufficient valuation officers can also drastically slow down the assessment process, contributing to the low valuation ratios observed in much of the continent (Bakibinga and Ngabirano 2019).

In the absence of widely available market information on transactions, such systems are also susceptible to collusion and corruption, as valuations in the absence of such data leave enormous scope for subjectivity and negotiation (Zebong, Fish, and Prichard 2018). As a result of these conceptual and practical challenges, many jurisdictions are unable to effectively implement the market-based valuation stipulated in inherited colonial-era laws. Consequently, they continue to levy property taxes on obsolete valuation rolls that exclude many properties and have little correlation with the wealth of property owners.

Some recent innovations have explored the possibility of using Computer-Aided Mass Valuation (CAMA) techniques to automate the assessment of property values in African cities. Researchers in Kigali, Rwanda, for instance, used high-resolution satellite imagery to assess the completeness of the existing property roll (D. A. Ali, Deininger, and Wild 2018). Together with information on sale prices in the land registry, targeted surveys, and routine statistical data, it was possible to use mass-valuation techniques to generate detailed tax maps of the city (D. A. Ali, Deininger, and Wild 2018). Also in Kigali, researchers used machine learning to predict property sale values with remote sensing data (building footprint, height, and characteristics estimated from two satellite images) and infrastructure and amenities data (Brimble et al. 2020). Findings suggest that proximity to infrastructure and amenities is the most important predictor of property sale price across models. Similarly, recent research in Kananga, DRC, used a small training sample of 2,000 properties and machine learning techniques to predict property values based on survey measures of property and neighbourhood quality (Bergeron and Kamalu Forthcoming). Similar to the project in Kigali, findings suggest that proximity to infrastructure (hospitals, schools, markets, gas stations, government buildings, police stations, major roads, etc.) is an important feature predicting value (Bergeron and Kamalu Forthcoming). Despite the promise of such technical innovations, they face major obstacles in terms of data availability. CAMA techniques are heavily reliant on the availability of accurate sales records or valuation estimates for a representative sample of properties, along with other data. When such data are lacking—as is the case in many African jurisdictions—surveys can act as a substitute (as in the above cited studies). Gathering this survey data, however, requires extensive expertise and can be prohibitively expensive for resource-constrained local governments.

In general, an effective valuation model needs to (1) ensure that properties are assigned a taxable valuable commensurate with the revenue needs of the jurisdiction, (2) ensure horizontal equity for similar properties (i.e., similar properties are assessed at a similar value), and (3) ensure vertical equity between different properties (i.e., more valuable properties are assessed at a higher level than less valuable properties). Valuation models can also be evaluated by the extent to which they are transparent to taxpayers and matched to the capacity requirements of the jurisdiction in question. Conceptually, there are three broad strategies available for assessing property values: market-based approaches, area-based approaches, and hybrid approaches.

1.2.1 Market-based approaches

Market-based approaches are dominant in most capital cities in sub-Saharan Africa and seek to establish the price a willing and informed buyer would pay to a willing and informed seller (Zebong, Fish, and Prichard 2017). This price is usually determined by looking at the recent sale prices of similar properties or pieces of land (Collier et al. 2018). An alternate market-based approach instead attempts to establish the annual rental value of a property, given that such information might be easier to determine than estimated sale value (Collier et al. 2018). The strengths of market-based approaches are that they ensure vertical equity by tying assessments directly to market value, and they are naturally buoyant in that tax assessments will increase as property values increase (Franzsen and McCluskey 2017c). The main limitation of such approaches is that estimating the market value of properties in sub-Saharan Africa is often imprecise, time-consuming, and prone to informality given the fact that property markets are highly illiquid, with limited buying and selling activity, and highly opaque, in that reliable transaction data is rarely available publicly (Zebong, Fish, and Prichard 2018).

1.2.2 Area-based approaches

Surface area-based approaches have historically been the main alternative to market-based approaches, focusing on simplicity (Zebong, Fish, and Prichard 2017). Area-based valuation models determine the taxable value of a property based solely on a direct or proxy measurement of the property size (e.g., land area, building footprint, roofline, overall floor area, number of rooms). Area-based approaches produce a highly transparent and easily-verified tax base, can be updated relatively easily with a standardized formula, and include some basic level of fairness to the extent that larger properties are likely to be more valuable than smaller properties (Zebong, Fish, and Prichard 2017). Their main limitation, however, is that they often significantly violate the principle of vertical equity. By not incorporating differences in the quality of either land or buildings, they often result in properties with very different values being taxed at a similar level, and thus lead to an inequitable distribution of the tax burden. To the extent that they constrain taxation of higher-value properties, area-based approaches can also significantly limit revenue potential (Collier et al. 2018). Low vertical equity may be of particular concern outside of large cities, where old and unimproved properties often have a large area or sit on large plots of land (Zebong, Fish, and Prichard 2017). Additionally, local officials are responsible for manually adjusting valuations upwards over time to ensure revenue buoyancy, which can prove politically challenging.

1.2.3 Hybrid approaches

Hybrid valuation models lie somewhere in the middle, in that they seek to maintain some of the simplicity of area-based approaches while incorporating some property features that are expected to effect value to achieve greater vertical equity (Collier et al. 2018). One version of a hybrid approach pioneered in Cameroon generates *presumptive* property values by multiplying surface areas by clear reference prices provided for in regulation. Reference prices are classified according to municipality, and zones therein, along with attributes of the property, based on the logic that they will capture value differentials between different locations (Zebong, Fish, and Prichard 2017). Such an approach does not perfectly predict market values but introduces a greater level of progressivity than simple area-based models.

An alternative approach employed in Sierra Leone, termed “points-based assessment,” takes the roofline of the built structure as a baseline for assessment, and then adjusts values upwards or downwards based on a subset of key and easily observable property features (e.g., location, construction material, access to services). The “points”—or value—assigned to different property features can be calibrated by conducting an expert survey of a small sample of rental values across the jurisdiction, and then building a simple regression model linking property features to value (Grieco et al. 2019). Such an approach maintains a close correlation with market value while simplifying and minimizing the need for expert assessment.

Figure 3 provides an overview of the relative strengths and weaknesses of these different approaches to property valuation. Market-value approaches, whether they rely on asset transactions or rental value data, can theoretically be highly accurate, but also have high data and estimation capacity requirements. As a result, they often lead to out-of-date, incomplete, and untransparent property rolls—the latter creating significant risk of collusion and corruption in administration. Area-based approaches are the least accurate option, and tend to result in significant vertical inequalities, but also have relatively low data and capacity requirements. Transparency can also be high for area-based approaches, in that it is easy for taxpayers to measure their own property and understand how the value was determined from that measurement. Points- or proxy-based hybrid approaches lie somewhere in the middle; some level of market data is required to calibrate the points assigned, and administrations need to enumerate the key property features of all buildings in their jurisdiction. Gathering this data and generating valuation assessments thus requires some level of estimation capacity within the administration. The transparency of points- or proxy-based systems can be either low or high, depending on whether administrations make the weightings assigned to the different property characteristics freely available.

Figure 3 A taxonomy of valuation systems[6]

Type of Assessment	Accuracy	Data requirements on transactions	Data requirements on land contents/characteristics	Estimation capacity required	Transparency
Real estate market value	High (where sales data are available)	Significant (on asset transaction)	High for greater accuracy	Significant	Can be low
Rental value	High (where rental values are available and rent controls are not applied)	Significant (on rental transactions)	High for greater accuracy	Significant	Can be low
Points/proxy	Medium (depending on calibration to market value and number of proxies used)	Not required (though helps with calibration)	Depends on number of proxies	Medium	Can be relatively high
Area-based	Low	None	Very limited	Limited	High

Countries vary significantly in the level of government that is responsible for property valuation, which can complicate the generalizability of any given model. In many countries, property taxation is either entirely centralized, or entirely decentralized. However, some countries divide responsibility for taxation and valuation functions between different levels of government. In such cases, the subnational government is typically responsible for taxation, while an agency of the central government is responsible for developing and updating all property valuations at the national level. In Ghana, for instance, local governments are reliant on the Land Valuation Division of the central government Lands Commission, which holds a monopoly on property valuation services (Mohiuddin and Ohemeng Forthcoming). The appeal of such an arrangement is that it ensures consistency in methodology across the country. But in many cases, such arrangements have resulted in poorly aligned incentives, with resulting long delays in updating valuations (Zebong, Fish, and Prichard 2018; Mohiuddin and Ohemeng Forthcoming).

1.3 Policy

Once properties have been identified and valued effectively, they need to be taxed. Typically, this is done with the application of a flat rate on the assessed value of properties. Rates may also differ depending on property use or type (e.g., domestic, residential, industrial, etc.). The revenue generated from property taxes is determined by the tax rate and the extent of any exemptions from taxation. Policymakers thus have several decisions to make related to the specific tax rate applied to different property classes and any exemptions provided. There is no "right" tax rate, as different governments and populations will have different preferences about the distribution of tax revenue in general, and how much should be generated from the property tax in particular. In determining an appropriate tax rate, policymakers need to consider a combination of (a) the base for taxation (e.g., rental value, estimated market value, points-, or area-based calculations), and (b) the revenue needs of the jurisdiction (Franzsen and McCluskey 2017b). If the tax rate would not generate sufficient revenue, given the existing property valuation roll and an assumption of near-universal compliance, then a rate increase is probably necessary for an effective property tax. Conversely, in cases where the tax rate would generate excessive revenue in a scenario of widespread

[6] Table adapted from (Collier et al. 2018).

compliance, then attention should be more focused on decreasing rates and encouraging compliance to ensure greater equity (Zorn 2012).

Almost every jurisdiction offers exemptions from the property tax for certain classes of property. Such exemptions are often used, at least nominally, to decrease the burden placed on poorer households. In practice, however, the proliferation of exemptions not only reduces property tax revenue but can significantly increase administrative complexity and open space for collusion and tax fraud. Uganda, for instance, exempts primary residences from property taxation (Bakibinga and Ngabirano 2019; Kopanyi 2015; Olima 2010). This policy aims to protect owners with valuable family properties but limited income to pay the property tax. Anecdotally, such owners are more prevalent in rapidly urbanizing cities with relatively illiquid property markets. These conditions lead to a population of owners in newly valuable properties—where they may have lived for generations—with limited income to pay the property tax. The Ugandan policy is designed to protect such property owners. However, to protect this group of potentially vulnerable property owners, the policy exempts a wide range of taxpayers who can and should pay. It also opens a large loophole through which owners of multiple properties can claim primary residency to avoid paying their liabilities. Verifying primary residency, in turn, places enormous administrative burdens on the local government. Elsewhere, exemptions for government buildings, buildings used for charitable purposes, or buildings owned by pensioners similarly reduce the revenue potential of the tax system, create loopholes for abuse, and increase administrative complexity (Franzsen and McCluskey 2017c). Property tax exemptions may make the tax more politically acceptable but can also introduce major administrative challenges. In establishing the exemptions regime, the responsible authority needs to consider these trade-offs carefully.

In resolving these tensions, a core question is who should be responsible for setting policy? Supporters of decentralization usually place this responsibility with local governments, as a means of providing them with greater revenue autonomy (Gadenne 2017). Granting local governments the ability to set tax rates, it is generally believed, provides the desired tax autonomy at the margin to promote political accountability (Zorn 2012). The hypothesis is relatively straightforward: by setting tax rates, local governments directly determine the tax bill that will be received by residents, and residents will thus be more likely to monitor the performance of local officials and demand accountability (Gadenne 2017; Prichard 2015).

But there are also potential downsides to localized policymaking. It can lead to a lack of harmonized tax policy, increasing compliance costs for owners with properties in multiple jurisdictions (Zorn 2012). It could also induce tax competition between jurisdictions seeking to attract businesses, which would further entrench regional inequalities as larger cities have more flexibility to lower their tax rates (Brueckner and Saavedra 2001; Slack and Bird 2015). Finally, local rate-setting can also lead to a proliferation of exemptions, as officials cater to various local constituencies (Zorn 2012). To circumvent these problems, it may be necessary and desirable for the central government to set a national band within which local governments have the discretion to set their own rates. At a broader level, there is no universal answer as to how to assign policymaking responsibility to maximize incentives to limit exemptions and set adequate rates. In some contexts, local governments may be more vulnerable to capture by powerful elite interests (Jibao and Prichard 2016). In other contexts, the central government may lack incentives to ensure effective local revenue raising (and may actively resist the development of local fiscal autonomy) (Zebong, Fish, and Prichard 2018). The ideal distribution of policymaking authority is thus likely to differ substantially based on the political economy of different countries and jurisdictions.

1.4 Billing and payments

Unlike most major taxes, which rely on taxpayers submitting declarations themselves (e.g., income tax, VAT), most property tax systems involve administrative assessment of tax liabilities. As a result, a core feature of property tax systems is the ability of administrations to distribute bills directly to taxpayers. While a seemingly basic component of the property tax system, distributing bills can pose enormous logistical challenges. In many cities in lower-income countries, street addressing and mapping are extremely limited, complicating the task of identifying taxable properties and delivering the correct bill (Abebrese 2019). Similarly, the absence of a well-developed postal service or mechanisms for confirming delivery can make it difficult to know that tax bills have been delivered. A related challenge is that some jurisdictions require tax bills be addressed to the legal owner. In contexts with weak land titling systems, identifying legal owners can prove extremely time consuming and at times impossible, thus delaying property tax reforms (Earle 2014; Boone 2014; Goodfellow and Owen 2018).

To tackle these challenges, extensive mapping and street addressing exercises now accompany most reform efforts (Franzsen and Youngman 2009). Such exercises increasingly employ satellite or drone imagery, and may be linked directly to city-wide valuation assessments (D. A. Ali, Deininger, and Wild 2018). Simple technological solutions, such as mobile-based applications, can also be used to coordinate and confirm the delivery of tax bills through the integration of geo-located references in the property roll (Stewart-Wilson Forthcoming). Reliance on technology, however, is rarely a silver-bullet solution, especially in lower capacity areas (Prichard and Fish 2017).

The task of receiving, recording, and accurately tracking payments is also seemingly simple, but can present major logistical challenges (Nengeze 2018). Historically, property tax systems relied on owners making payments directly to tax collectors, either in the field or at government offices. However, relying on field-based payments can develop the kinds of relationships that are ripe for collusion and corruption (Fjeldstad 2003; Piracha and Moore 2016). Requiring payment at government offices may pre-empt the development of such relationships but places an additional burden on taxpayers that may decrease compliance—and such payments can nonetheless remain vulnerable to informality. As a result, most reform programs now try to delegate the payments process via banks, with funds deposited directly into government accounts (Krolikowski 2014). Such arrangements, however, can also present major challenges. To facilitate compliance tracking and subsequent enforcement, tax officials must be able to accurately credit the accounts of individual taxpayers with payments made at the banks. But banks often supply payment information in inconsistent or incomplete formats, and subnational jurisdictions may not have the capacity to match payments to taxpayer accounts.

One solution to the matching problem has taxpayers come to the tax office with their payment receipts. However, this procedure places an additional compliance burden on taxpayers, and often results in some payments that are made at banks not being recorded at the tax office, thus complicating tracking and enforcement. Other jurisdictions have sought to establish direct IT links with banks so that payments are automatically credited to taxpayer accounts. But this strategy requires building new links between the IT systems of the banks and local governments, which can end up being quite expensive or can run into security challenges (Okunogbe and Pouliquen 2018). Some governments are introducing mobile payments as a way to limit interaction between taxpayers and collectors, but such solutions can carry similar cost and security implications (Coulibaly Forthcoming). There are no easy answers to the logistical challenges of delivering bills and accurately tracking property tax payments. However, a variety of solutions are employed in different contexts, and technology is providing new options for policymakers to consider.

1.5 Enforcement

Once tax bills have been distributed, governments need to take effective enforcement action against those who do not comply by the established deadline. Without effective enforcement, taxpayers will have little incentive to voluntarily comply with their property tax liabilities, both because they face no penalty for non-compliance, and because they will not believe that others are paying their fair share (Filippin, Fiorio, and Viviano 2013). Research from Sierra Leone, for example, provides some evidence that compliance increased dramatically in jurisdictions where city councils expanded enforcement activities—and in particular where those enforcement activities targeted the highest value taxpayers (Jibao and Prichard 2016). Despite the necessity of strong enforcement action, anecdotal evidence suggests that it tends to be extremely limited in sub-Saharan Africa (Bodea and LeBas 2016). Somewhat surprisingly, enforcement also remains the least studied step of the property tax process. Lack of enforcement action sometimes has technical roots. Where tax officials are unable to reliably link payments to taxpayer accounts, it becomes impossible to identify defaulters. The larger issue, however, appears to be mainly political, as property tax enforcement tends to be extremely unpopular and not supported by politicians.

Legally, most property tax systems include a broad range of enforcement mechanisms. Such mechanisms typically include, in order of increasing severity, issuing reminder notices, publicizing the names of high-profile defaulters, the application of penalties and interest, and finally, court action that can result in the seizure and selling of properties (Bakibinga and Ngabirano 2019). In Uganda, some municipalities have initiated legal proceedings against high-profile defaulters. This option, however, is seen as lengthy and costly, and as a result is rarely used. Some property owners may even see court action as an opportunity to indefinitely postpone the payment of their rates, as in the Ugandan case defaulters repeatedly appealed the ruling of lower courts to draw out the process (Bakibinga and Ngabirano 2019). Thus, while court action may sometimes result in a favourable ruling for the local government, it also imposes additional costs and the risk of uncertain outcomes. Although research remains limited, the political challenges of enforcement are likely to increase with the severity of the mechanisms pursued, with the seizure and selling of property being particularly unpopular.

Compounding the basic problem of political resistance, most countries also face challenges related to unclear property rights and shortcomings in the court system. By design, property taxes target property owners, as they are the primary beneficiaries of increasing land values caused by the investment in public amenities funded by property tax revenue. On that basis, legal ownership in the form of title and registration in the land registry has traditionally been considered a prerequisite for determining property tax liability. In the African context, however, many *de facto* owners do not hold formal title, and land registries are largely incomplete or out-of-date (Goodfellow and Owen 2018). In many cases, owners face negative incentives to formalize their land claims, to the extent that they are then more likely to face taxation costs. Due to capacity constraints and the pervasiveness of land disputes in many lower-income countries, land titling processes can often take many years, or simply stall indefinitely (Boone 2014; Earle 2014; Goodfellow and Owen 2018). As a result, enforcement efforts can be derailed by the inability to identify property owners.

To get around this challenge, some recent reforms have taken a taxation-led, as opposed to titling-led, approach to property taxation. Taxation-led strategies seek to register the building itself instead of the owner. Such an approach allows for taxation even if the formal owner has not been established (Kelly 2014; Bahl, Martinez-Vazquez, and Youngman 2008). Conceptually, a taxation-led approach rests on the idea that you can tax a visible and immovable asset like a building without necessarily knowing who the legal owner is, or without having a perfect cadastral survey of the land. Practically, it is more straightforward than titling-led approaches. In Freetown, Sierra Leone, for example, tax bills were simply addressed to “The Owner,” along with legal instructions that the tax liability did not depend on being able to identify the owner by name (Kamara, Meriggi, and Prichard 2020). Owners were also invited to contact local authorities to have their names added to the administrative record if they so wished. Unlike other taxes, not knowing the owner does not directly stop enforcement action, which can be carried out through the seizure and selling of the property. Instead of struggling to formally register all legal property owners, taxation-led approaches instead move ahead with revenue raising activities, while gradually gathering legal ownership information as it becomes available.

2 Property tax reform challenges

Despite the challenges, there remain compelling reasons to focus on reforming existing property tax systems. Aside from their advantages in terms of revenue mobilization, economic efficiency, and equity, property taxes also—more than perhaps any other tax type—offer the potential for the emergence of a virtuous cycle of voluntary compliance and service delivery (Prichard 2017). For national-level taxes, the connection between additional revenue collection and service delivery is often distant and vague. For property taxes, by contrast, these connections are potentially much more salient at the local level.

Property tax revenue may be small compared to national revenue sources, but it can have significant welfare and livelihood benefits, especially for lower-income people. The services provided by local governments with property tax revenue—such as sanitation and road improvements, regular garbage collection, flood mitigation, and low-income housing—tend to be quite visible, and have a large impact on the daily life of residents (Brinkerhoff, Wetterberg, and Wibbels 2018). They also tend to disproportionately benefit lower-income residents. But achieving these benefits is not straightforward. There is growing evidence that the technical constraints to property tax reform persist for largely political reasons. Expanding local tax demands entails confronting powerful vested interests (Jibao and Prichard 2015). Reforming existing systems entails confronting entrenched bureaucracies and sometimes-fraught inter-governmental relations. What follows correspondingly focuses on the main sources of political resistance to property tax reform: centre-local government relationships, local-level bureaucracies, and taxpayers themselves.

2.1 Centre-local government roles and tensions

The first source of political resistance that needs to be considered by reformers stems from the relationship between central and local levels of government. Across lower-income countries, there is wide variation in which aspects of property tax systems are decentralized and which remain the responsibility of national governments. In some countries, the discovery and valuation stages of the property tax cycle are centralized, while the rest are decentralized. In other countries, central governments maintain control over the setting of property tax rates and associated exemptions, or at least provide a band within which rates can be set. A divide exists between Francophone and Anglophone countries, with the former commonly adopting more centralized systems and the latter tending to rely on more decentralized responsibilities (Goodfellow 2017a). This divide has its roots in different strategies of colonial rule, and has been accelerated by the trend towards decentralization supported by Anglo-American development assistance throughout the 1990s (Smoke 2001). In terms of successful property tax reform, there is no clear consensus on the ideal distribution of responsibilities between central and local levels of government. Property tax systems are made up of several distinct but interconnected processes, as outlined above, some of which may be better suited to local or national administration depending on the context. Broadly, successful property tax reform is less about which functions are centralized or localized, and more about the specific nature of centre-local relations in each context, and how conducive these relations are to effective partnership.

At a conceptual level, there are several points supporting the greater centralization of property tax collection. For one, central governments may have much greater technical capacity to assess properties and collect taxes, especially given substantial investments over the past two decades to develop strong, semi-autonomous revenue authorities (Moore, Prichard, and Fjeldstad 2018). Second, corruption and misuse of funds are perceived to be easier to detect and punish at the national level (Goodfellow 2017a). Third, central tax authorities already hold significant amounts of taxpayer data that may help determine property ownership and collect property taxes (Goodfellow 2017a). Finally, central tax authorities often carry considerably more political weight than local authorities, and may thus be better able to enforce payment and mitigate resistance from taxpayers, and in particular from elites (Goodfellow 2017a). In recent years, these justifications have been used in varying configurations to recentralize property taxation in countries such as Rwanda, Tanzania, the Gambia, and at the federal state level in Nigeria (Cheeseman and de Gramont 2017; Fjeldstad, Ali, and Katera 2017; Goodfellow 2017a).

Similarly, there are several conceptual arguments in favour of localizing property taxes. First, localization can align incentives for local officials with improved revenue generation. As property tax revenues are typically spent at the local level—regardless of who collects them—local officials may have stronger incentives to maximize collection (Fjeldstad, Ali, and Katera 2017). Second, localization can allow the property tax system to sidestep issues associated with registering properties and verifying ownership. Central governments are typically responsible for such processes, and reliance on registration and verification as a pre-condition for taxation has historically delayed or derailed many reform initiatives. Local officials may be better positioned to pursue a taxation-led approach that seeks to tax properties themselves, regardless of formal ownership status (Moore and Monkam 2016; Kelly 2014; Bahl, Martinez-Vazquez, and Youngman 2008). Third, centralized administration has often been criticized for being excessively slow-moving, overly costly, and inflexible. Localizing property tax administration can allow for more simplified approaches that reduce both financial and capacity costs (Nyirakamana 2021b). Finally, localizing property tax administration has the potential to strengthen accountability linkages between citizens and their local governments. Because the property tax is highly salient, and because the revenue it generates is typically used for equally salient investments in local service provision, localized property tax administration is expected to contribute to a virtuous cycle of tax bargaining that increases political participation, accountable governance, and revenue generation (Prichard 2015; 2017).

Despite the huge importance of these questions, there is limited empirical evidence about which administrative arrangements have been most successful, and which offer the greatest likelihood of successful reform in the future. Francophone countries, for example, which tend to have inherited more centralized systems as part of their colonial legacy, have widely varying property tax performance, and most of them are under-performing (Goodfellow 2017a). Performance in the countries that have chosen to recentralize has also been mixed. Tanzania, for example, conducted an experiment in recentralizing property tax collection between 2008 and 2014. Although local authorities were performing poorly before 2008, the recentralization effort saw only a minor improvement in its first year, and collections essentially flatlined in subsequent years. In 2012, there was a marked improvement in property tax collections. However, administrative responsibility was returned to local authorities two years later, in 2014, after which collections saw an even more dramatic increase (Fjeldstad, Ali, and Katera 2017). Rather than which level of government had explicit responsibility for property tax collection, revenue performance in Tanzania seems to have depended more on the incentives for constructive working relationships between the different levels of government (Fjeldstad, Ali, and Katera 2017). The degree of centralization or decentralization itself does not appear to have been a direct cause of improved property tax performance.

The importance of incentives for constructive centre-local relations are demonstrated by the Tanzanian case. Central government recentralization allowed the introduction of more sophisticated cashless systems for accepting payments. But any gains from this IT reform were undermined by the poor working relationship between central and local authorities, exacerbated by the perception among local authorities that the central government had "taken" one of their core responsibilities (Fjeldstad, Ali, and Katera 2017). Central government authorities also did not have clear incentives to ensure the effective collection of property taxes, as all property tax revenue is reverted back to local governments (Fjeldstad, Ali, and Katera 2017). The new cashless system remained in place following the reversion to decentralized administration in 2014, allowing local authorities, who stood to gain most from the tax, to benefit from the efficiency gains of the IT reform (Fjeldstad, Ali, and Katera 2017). In this case, improved collection can be credited to a technical reform, coupled with the improved centre-local relations accompanying the reversion of collection responsibility to the local level.

Lagos State in Nigeria provides an example where moving responsibility for property tax collection up the government hierarchy has contributed to more substantial gains. The previous system was fragmented, with three separate payments required to two levels of government. Property owners owed ground rent, which was linked to the value of the land, to the state government; occupiers of the land owed tenement rates, applied as a flat fee, to the local government; property owners in certain areas also owed the Neighbourhood Improvement Charge (NIC) to the state government to pay for large infrastructure investments (Goodfellow and Owen 2018). Beginning in the early 2000s, the Lagos State Government consolidated these different charges into a single Land Use Charge (LUC) with a transparent assessment methodology. Following more than a decade of negotiations and conflict, in which the rate on commercial properties was cut by more than three quarters, the LUC has been gaining increasing acceptance (Goodfellow and Owen 2018). As a result, the LUC contributed to a substantial increase in state government revenue, from less than NGN 10 billion (USD 26 million) in 1999 to almost NGN 140 billion (USD 370 million) a decade later (Goodfellow and Owen 2018).[7] In the case of Lagos State, the centralization of property taxes has thus proven quite successful. However, less clear is whether centralization *per se* was the key driver of this transformation, or a reflection of other critical changes—with recent studies focusing instead on the rationalization of the previously fragmented system, enhanced political commitments to revenue mobilization, and efforts to more effectively link revenues to services (Cheeseman and de Gramont 2017).

The questions of who is responsible for property valuation often lies at the heart of tensions in centre-local government relations. In Ghana, for instance, the Land Valuation Division (LVD) holds a monopoly on all valuation services in the country (Mohiuddin and Ohemeng Forthcoming; Nyirakamana 2021a). Local governments are thus bound to procure the services of the LVD to update their property valuation rolls. There are two significant problems with this centralization of valuation responsibility. First is the inability of the LVD to value properties in the country in a timely manner. The LVD has only a small number of offices nationwide and suffers from a shortage of qualified staff including trained valuation officers and logistical support. LVD officials are also poorly remunerated, and compensation payments are often delayed (Mohiuddin and Ohemeng Forthcoming). As a result, there is a perpetual backlog of properties to be assessed in Ghana, which delays revenue mobilization efforts at the local level.

Second, the costs of valuation are born by local assemblies, which often have meagre resources, at least in part because of ineffective property tax systems (Nyirakamana 2021a). Without payment, the LVD is permitted to withhold the completed valuation rolls from the assembly. This provision poses serious legal problems for the local assemblies, as the law states that they are not permitted to charge property taxes if valuations have not been appropriately updated, and allows owners to seek redress through the courts if the law is not

[7] The largest portion of this increase is due to reform of the Personal Income Tax (PIT) system, which provides most of the state revenue. However, the LUC is second only to PIT in terms of total collections and has also increased substantially.

adhered to (Mohiuddin and Ohemeng Forthcoming). To address these problems, central government is considering amending parts of the existing law to permit local assemblies to conduct a “cost-benefit analysis,” and borrow the resources needed for valuation if the analysis indicates that costs can be recouped in a reasonable time period (Mohiuddin and Ohemeng Forthcoming). Central government is also considering a broader liberalization of valuation altogether. Liberalization would decentralize valuation responsibility by enabling local assemblies to procure valuation services from private contractors or firms. Private provision of valuation services could, in theory, lower both time and financial costs. A caveat, however, is that any private valuation professional must be certified by the Ghana Institute of Surveyors, thus adding another layer of bureaucratic complexity to the valuation process (Mohiuddin and Ohemeng Forthcoming).

The effectiveness of property tax reform efforts thus seems to depend more on the nature of centre-local relations, and on the incentives, institutional structures, and legal frameworks that guide action by the responsible authorities, than on the specific details of which stages of the property tax cycle are decentralized. In democratic countries, this relationship can depend on whether the same political party is in charge nationally and at the local level (Riedl and Dickovick 2014). Opposition-led local governments may be more incentivised to assert their independence from the central government by prioritizing own-source revenue mobilization, either to gain greater political independence generally, or more specifically to guard against potential delays or reductions in intergovernmental transfers (Goodfellow 2017a; Jibao and Prichard 2015). Conversely, central governments may have greater political incentives to undermine the performance of opposition-controlled local governments (Goodfellow 2012; Jibao and Prichard 2015).

Central government interference in local-level reform efforts may also stem from incentives to protect powerful supporters and allies from taxation. Research in Kampala, Uganda, for instance, has shown that the national government repeatedly undermined efforts by City Council to implement more transparent assessment and enforcement processes (Goodfellow 2010). Observers credited the central government’s actions to the fact that national politicians and their allies own many of the most valuable properties in the city (Goodfellow 2010). In many countries, the wealthiest and most powerful property owners are often those most closely connected to the ruling national party, creating strong incentives for central government to derail local reform efforts.

In general, the available evidence suggests that central governments may have greater technical capacity to carry out property tax reform. However, centralized administration is more problematic in terms of aligning incentives with performance and may simply not have enough staff to effectively administer property taxes across the whole country (Nyirakamana 2021a). Local governments, by contrast, can be highly motivated to pursue property tax reform to assert their autonomy and provide local services (Prichard 2017). However, if the central government provides little moral or technical support for these efforts, then a countervailing incentive may emerge, with local governments letting taxpayers off the hook to maintain popular goodwill while simultaneously blaming the central government for poor performance (Goodfellow 2017a). The crucial factor determining whether local governments are able to pursue reform is whether they manage to create a convincing public narrative that property tax is a good and fair tax that brings tangible benefits to citizens in terms of expanded services (Prichard 2017). Creating such a narrative is generally facilitated by a congenial working relationship with higher levels of government.

2.2 Dynamics of administrative resistance to property tax reform

The second main source of opposition to property tax reform is local administrations themselves. The basic premise in much of the literature is that reform is inherently desirable, and that administrative resistance to change is based on dubious motives of self-interest

(Fjeldstad 2015). However, researchers have also argued that such self-interested motives cannot explain all resistance; in some cases, opponents are simply not convinced of the appropriateness of ongoing reforms (Therkildsen 2001). Determining the true motives behind administrative resistance is often difficult, however, as objections to the local appropriateness of reform may simply be a cover for more self-interested motives.

Accumulated experience in property tax reform suggests that administrative resistance often centres around efforts to digitize or automate aspects of the property tax cycle. Existing, often manual, systems in many countries leave substantial space for subjectivity, collusion, and corruption in the discovery, valuation, and payment stages of the property tax cycle. The informal rents flowing to administrators, and sometimes from them to more senior levels, can create entrenched resistance to reform. Valuation officers, for instance, may accept side payments to assess properties at a lower level, or to leave them off valuation rolls altogether. To protect such opportunities, valuation officers may monopolize and closely guard access to information about the valuation process, even from their more senior colleagues. In such cases, even when senior leadership is supportive of reform, they may have a limited understanding of what is happening within their own administration. Alternatively, informality may occur at the payment stage—especially when payments are made in-person to tax officials, rather than through banks (Nyirakamana 2021). Digitizing the valuation and payment stages of the property tax cycle limits such opportunities for informality by introducing greater transparency to the process, and as a result may face entrenched opposition from within local administrations.

In addition to limiting opportunities for rent-seeking, technology-driven reforms can threaten the positions of older or more senior officials. If their skills and expertise are closely linked to existing manual systems, then senior officials may fear their positions becoming obsolete, and resist IT implementation in response (Nyirakamana 2021a). Administrative resistance may thus represent a more standard narrative of resistance to change, in which some stakeholders see impending changes as a threat to their jobs, or simply as a natural fear of the unknown (World Bank 2015). In such cases, simplified IT solutions, coupled with a clear change management strategy and extensive capacity building programs, may help to ameliorate such concerns.

Resistance to reform efforts on the part of administrators may also be a function of low salaries. In Sierra Leone, for instance, where salaries for senior local government officials are as low as US$100 monthly, it is suspected that informal payments make up a substantial portion of remuneration (Stewart-Wilson Forthcoming). Introducing greater transparency to valuation or payment processes may thus pose a direct threat to the livelihoods of local government officials. In such cases, successful reform almost certainly needs to be coupled with substantial salary increments or performance bonuses for local officials. In many African countries, however, local government administrators are hired and appointed by the central government, and pay scales are managed by central public service commissions.

Informality, which in turn leads to resistance, can also be enabled by legislation. In many African countries, the legal framework for property taxation—which may be inherited from colonial-era laws—stipulates market value as the tax base. However, as discussed above, property markets in Africa are often illiquid and highly opaque. With little available or reliable data on the sales price of comparable properties, valuation becomes a highly subjective exercise (Zebong, Fish, and Prichard 2017). Even in jurisdictions that rely primarily on property area for the tax base (which can, in theory, be objectively verified), capacity constraints limit the ability of local governments to audit the decisions made by valuation officers in the field. Valuation officers may thus have a significant degree of autonomy in assigning property values and auditing their assessments can prove challenging. Such autonomy in turn enables collusion between property owners and valuation officers (Piracha and Moore 2016). Reforms that seek to change the tax base to reflect more simplified and objective criteria, or that seek to digitize valuation procedures to enable greater transparency and oversight, directly challenge the autonomy enjoyed by valuation officers. Such officials may thus have a strong incentive to closely guard access to information, and to advocate for the maintenance of existing manual methods.

A case study from Pakistan demonstrates some of these dynamics, and shows how the relationship between field staff, taxpayers, and senior departmental officials shape incentives for reform (Piracha and Moore 2016). Field staff in Pakistan have a deep knowledge of virtually all the properties in their jurisdiction, including those that are both registered and unregistered. They maintain a written register of properties in the office, with basic information on assessments, payments, and arrears. But their personal knowledge is much more extensive, including ownership, new construction, property use, rental value, and the political and social connections of owners. This valuable unwritten information is monopolized by field staff, and not shared even with their supervisors (Piracha and Moore 2016). Field staff also enjoy wide discretion in making and adjusting property value assessments, opening space for collusion with property owners. In Pakistan, collusion to directly reduce assessed values is not the norm; rather, because there is a large differential in tax rates between rented and owner-occupied properties, this is where collusive activities are concentrated. Some rented shops in a large plaza, for instance, may be assessed as owner-occupied, significantly lowering the overall tax bill (Piracha and Moore 2016). Such changes are difficult for supervisors and senior officials to detect without the detailed unwritten knowledge that is monopolized by field staff.

Field officials monopolize and manipulate the information they report to supervisors to protect these collusive opportunities, which in turn limits the possibilities for reform. Even when senior officials are motivated to improve property tax collection, for instance, they only have access to aggregate collection figures, and no information on how much revenue is constituted by arrears collected, total arrears outstanding, or the overall property tax potential of their jurisdiction (Piracha and Moore 2016). Additionally, senior officials are highly present-oriented, focusing on monthly or annual collections targets, as it is these metrics that are used to evaluate their performance. Senior staff are also routinely rotated between jurisdictions by the central government to keep them disempowered and dependent on their political masters (Piracha and Moore 2016). As a result of these dynamics, senior officials have little access to the information that would be necessary for reform, and little incentive to pursue longer-term structural changes to the way that property tax is collected.

Despite this case study evidence, administrative resistance to reform can prove hard to document and understand, especially for external reformers, as it is often hidden, and may manifest as a generalized rejection of the local appropriateness of reform efforts. In some cases, such concerns are justified; in others, they may simply be cover for more self-interested motives. Parsing the distinction between these motivations is often difficult.

A case study of secondary cities in Kenya and Senegal, for example, found that perceptions of the property tax among administrators differs markedly between city councils (Cirolia and Mizes 2019). These differing perceptions, in turn, result in different justifications for administrative resistance to reform. In some jurisdictions, administrators see the property tax as a payment for the provision of services. In others, administrators see the property tax as a payment for the general operations of the community, with the accompanying view that lower-income households should not be expected to pay, even if they own property. In neither case study location do administrators perceive property taxes as a progressive tax on wealth for the provision of public services, as suggested by much of the Anglophone tax literature (Cirolia and Mizes 2019). If tax officials don't perceive the property tax as a progressive tax on wealth, then they may see reform efforts that seek to maximize collections from wealthy property owners as unfair and be more resistant to reform. However, determining if this resistance stems from legitimate concerns about the local appropriateness of reform, or if it stems from incentives to protect informal rent-seeking opportunities between wealthy property owners and local officials, is challenging. Administrative resistance to reform may also be driven by broader ideological alignments. In Jamaica, for instance, interview respondents attributed the slow pace of reform to a *bureaucratic logic*, in which both junior and senior officials held beliefs related to the importance of maintaining stability and the status quo (Gatchair 2015).

Administrative resistance to reform is thus likely to be driven by different concerns depending on the context. In many cases, officials within the local administration might resist reform to protect rent-seeking opportunities. In others, the main driver of resistance is more benign concerns with the general direction of reform, or broader ideological alignments that lead local officials to see reform as largely unnecessary.

2.3 Elite resistance to property tax reform

The most well-recognized source of resistance to reform comes from taxpayers themselves. In most sub-Saharan countries, levels of tax compliance are relatively low, reflecting several factors that are captured by the Afrobarometer surveys. In some cases, non-compliance is based on perceptions of weak enforcement; taxpayers who believe that it is relatively easy to avoid taxes are less likely to have a tax compliant attitude (M. Ali, Fjeldstad, and Sjursen 2014). Service provision also plays an important role in attitudes to tax compliance. Individuals who are more satisfied with the provision of public services are more likely to have a tax compliant attitude (M. Ali, Fjeldstad, and Sjursen 2014). Additionally, frequent payments to non-state actors for services (e.g. payments to criminal gangs for protection, or to NGOs for water access) reduce tax compliant attitudes among the general population (M. Ali, Fjeldstad, and Sjursen 2014). Evidence from Sierra Leone suggests that such informal payments are ubiquitous at the local level, and in areas of weak formal statehood (van den Boogaard, Prichard, and Jibao 2018; van den Boogaard 2018). Taxpayers may thus resist paying their property rates when enforcement mechanisms are perceived to be weak, when they do not believe that they receive services commensurate with the charges being levied, or when they are already required to make alternate payments for services.

Perhaps more important than low compliance per se is deeper political resistance to reform from taxpayers, which has prevented the adoption of widely recognized reform measures and strategies for improving outcomes. Elite owners, for instance, with multiple properties can be a particularly strong source of resistance, as they have the most to lose from reform, and may have the political connections and influence to derail reform efforts (Jibao and Prichard 2016). In contrast to other taxes, which are often withheld at source or levied indirectly, the property tax is a highly visible tax. Its salience to taxpayers is one of its key benefits as a mechanism to encourage the development of a virtuous cycle of tax bargaining. But this salience also makes it more difficult for politicians to reform (Slack and Bird 2014).

A robust property tax system depends on disproportionate collection from the most valuable properties owned by elites, who have been successful in actively and passively resisting property tax reform in the past (Goodfellow 2017b). A comparative study of four city councils in Sierra Leone that pursued similar reforms between 2006 and 2008 throws some light on these dynamics. Different reform outcomes between the city councils were credited primarily to the cohesiveness of elite resistance (Jibao and Prichard 2015). The influence of elite resistance on reform outcomes seems to reflect the strength of direct personal ties and shared interests between economic and political elites, and the power wielded by local economic elites by virtue of their role in shaping local economic opportunities and financing local elections (Labonte 2012). In particular, the influence of local economic elites made it much harder to pursue aggressive enforcement in those city councils with strong elite cohesion.

Broad public support can help to counteract the resistance of local economic and political elites by providing politicians with the political capital to pursue more aggressive reform (Levi 2008). The Afrobarometer survey results, for instance, do indicate a high general willingness to pay taxes, although this willingness is tempered by poor performance on the part of governments (M. Ali, Fjeldstad, and Sjursen 2014). These results suggest a latent potential for reform where enforcement and reciprocity can be established, and where vested interests can be overcome. However, the close link between property taxes and service provision has made it difficult to build broad public support for reform where the quality of those services is poor, and where residents have limited trust in their local government (Prichard 2017). In Freetown, Sierra Leone, residents noted that they would be more willing to pay their property rates if services were more reliably provided (Grieco et al. 2019). The recent election of a popular new Mayor seems to have provided a brief “window of opportunity” during which residents were more willing to give the local government the benefit of the doubt that revenues from the reformed property tax system would be effectively directed to service provision (Grieco et al. 2019). Without visible service improvements, however, such sentiments are likely to dissipate quite quickly. Politicians thus often shy away from potentially effective but politically costly reforms (von Haldenwang 2017).

3 Strengthening property tax compliance

Alongside the need to address technical and political barriers to reform, the construction of more effective property tax systems also depends on increasing levels of tax compliance. Part of the foundation of tax compliance is the existence of credible and fair enforcement, as few taxpayers will comply if they believe there will be no consequences, or if they believe their neighbours are not paying their fair share (Alm, Bloomquist, and McKee 2017; Filippin, Fiorio, and Viviano 2013). But there is now a broad understanding that compliance is driven not only by the quality of enforcement but also by the level of “tax morale” (Kangave, Mascagni, and Moore 2018). Tax morale refers to citizens’ nonpecuniary motivations to comply with tax demands—that is, motivations to comply *other than* the threat of enforcement or direct costs of non-compliance (Luttmer and Singhal 2014). Given the limited enforcement resources available to most governments in lower-income countries, compliance rates are higher and inconsistent with what rational compliance calculations would predict (Cummings et al. 2009; Prichard et al. 2019). This observed difference in predicted and actual compliance levels is credited to tax morale (Alm 2019; Prichard et al. 2019).

Research has shown a number of underlying drivers of tax morale, including values and ethics, social norms, and a range of factors that shape overall trust in the tax system and government (Prichard et al. 2019). Many accounts of tax morale link it to underlying “ethics” or “values,” and on perceptions of government legitimacy (Prichard et al. 2019). This focus is reflected in public-facing campaigns that stress the importance of paying taxes and seeking to establish a “culture of tax compliance.” Tax morale is almost certainly affected by these vaguely-defined ethics and values—but they are also likely difficult to change over the short- to medium-term (Alm and Torgler 2011). More importantly, recent research suggests that cross-country variation in tax compliance is driven primarily by differences in governance, rather than by individual ethics and values (Andrighetto et al. 2016).

From a reform perspective, it is thus likely to be a more operationally-focused understandings of trust in the tax system that leads to improved tax morale and, by proxy, compliance (Prichard et al. 2019). Definitions of trust vary across disciplines, but generally share a common orientation in that the degree of trust experienced by an individual is a learned behaviour, shaped by changing experiences, rather than by a stable personality trait (Prichard et al. 2019). Levels of trust in government, for instance, are understood to fluctuate in response to who is in power, to the policies that are adopted, and to the ways they are implemented. More simply: concrete government action can drive increased trust and expanded compliance.

Social norms also likely play an important role in driving tax morale and compliance, but primarily as an intervening variable that translates increased trust into compliance. Social norms, in the context of tax compliance, are not about individual ethics and values, but are usually defined as the prevalence or acceptance of tax evasion among a reference group (Kirchler, Hoelzl, and Wahl 2008). Where norms of compliance are weak, improvements in trust may translate to compliance more slowly. But over time, improvements in trust in the tax system can shift broader social norms as well (Prichard et al. 2019). Conversely, where social norms of compliance are high, they might sustain compliance in an environment of declining trust. But over time, declining trust will undermine a social norm of compliance (Prichard et al. 2019). Social norms thus act as the "sticky" component shaping the translation of changes in trust to changes in compliance.

The key question in relation to property tax reform is thus what factors shape trust in the tax system, and by extension are likely to shape norms of compliance and drive tax morale? At a high-level, these factors can be organized into perceptions of fairness, equity, and reciprocity and accountability. Fairness captures the extent to which taxpayers believe the process of paying taxes is fairly designed and administered. It includes their understanding of the overall system, treatment by tax collectors, perceived reasonableness of penalties, and the availability of recourse in the case of any grievances (Prichard et al. 2019). Perceptions of equity capture the extent to which taxpayers feel the tax burden is fairly distributed in society, and the extent to which everyone is required to pay their "fair share (Prichard et al. 2019)." Perceptions of reciprocity and accountability lie at the core of the social contract, and capture the idea that tax revenue will be used effectively to advance the provision of valued public goods and services (Prichard et al. 2019). In other words, the key question for governments is whether taxpayers believe that taxes are, in fact, used for community development.

Reform efforts that strengthen perceptions of fairness, equity, and reciprocity and accountability in the property tax system are thus likely to have the greatest impact on shaping norms and driving tax morale, which in turn are expected to improve compliance. There are several concrete actions that governments can take to directly address these perceptions, including taxpayer education, improving procedural fairness, reducing space for harassment, improving equity in administration, linking service delivery more explicitly to property taxes, and strengthening accountability mechanisms.

3.1 Taxpayer education

Research suggests that taxpayers are more likely to trust the tax system, and thus to be compliant, when they have a clear understanding of how much tax they are expected to pay, the basis for those liabilities, that everyone pays their fair share, and how tax revenues are used (Prichard 2017). Taxpayer education programs can play an important role in building that understanding and trust, where it is then backed by concrete government action.

Across Africa, many taxpayers have a poor understanding of the tax system in general. In the 2016 round of the Afrobarometer survey, over 55 per cent of taxpayers reported that it was "difficult" or "very difficult" to find out what taxes they are supposed to pay to government.[8] In a Rwandan survey of new taxpayers with basic questions about the tax system, the average respondent got less than a third of the answers correct (Mascagni, Santoro, and Mukama 2019). Recent evidence from Eswatini also confirms the basic point: the majority of taxpayers in Africa do not have a clear understanding of what taxes they owe

[8] Afrobarometer Data, Round 6, 2014/15, available at: https://afrobarometer.org/data/merged-data

to the government, how those taxes are calculated, and what tax payments are used for (Santoro et al. 2020; Isbell 2017).

Lack of knowledge about the tax system is problematic for perceptions of fairness, equity, and accountability, and by extension for compliance (Fjeldstad 2016; Fjeldstad, Schulz-Herzenberg, and Sjursen 2012). Compliance has both cognitive and financial costs for taxpayers, as they grapple to understand and comply with the system. When general taxpayer knowledge is low, these costs can be high and regressive. Small taxpayers bear the largest burden to understand and comply with their tax obligations (Coolidge 2012). These costs create frustration and perceptions of unfairness, which in turn harm compliance levels. Moreover, evidence suggests that poor knowledge might prevent taxpayers from engaging in public debates around tax (Isbell 2017). Excluding certain segments of the population on the basis of knowledge is likely to undermine beliefs in the accountability and fairness of tax systems and governments (Moore 2015).

Does taxpayer education work to address this knowledge gap? A review of taxpayer education initiatives found a huge range of activities, including school-based tax clubs, mobile tax education units in rural areas, radio programmes, songs, social media videos, and even tax-themed soap operas (Mascagni and Santoro 2018). The efficacy of such initiatives, however, remains largely under-studied. One impact evaluation of a hands-on taxpayer training program with new businesses in Rwanda did find positive results. While initial knowledge was low, attending the training session increased the average participant's knowledge about the tax system by 40 per cent, and decreased perceptions about the system's complexity by 14 per cent (Mascagni, Santoro, and Mukama 2019).

Anecdotally, it appears that many local governments conduct education campaigns that amount to exhortations for taxpayers to comply with their obligations. But research suggests that this is not what taxpayers are seeking. Rather, taxpayers seek an understanding of why they are being asked to pay a certain level of taxes (i.e., what is the basis for assessment?), what they can do if they believe the assessment is incorrect or unfair (i.e., how to appeal?), how to pay their liabilities most simply, and how the revenue raised will be used (Mascagni and Santoro 2018). Based on these preliminary findings, efforts to increase tax compliance should focus on explaining to citizens how their taxes are calculated, how to seek redress in the event of a grievance, and how revenues are used. Such taxpayer education initiatives have the added benefit of increasing transparency—which is, in turn, also associated with higher levels of tax compliance (Moore, Prichard, and Fjeldstad 2018).

3.2 Improving procedural fairness

Perceptions of procedural fairness are in many ways linked to taxpayer understanding of the tax system. In terms of property taxes specifically, experience suggests that taxpayers often do not understand the basis of assessment for their property, or how to register grievances if they believe that they have been unfairly assessed. Taxpayer education campaigns can help to improve this understanding. But local governments can also take concrete steps to improve the clarity of assessment and appeal procedures for taxpayers.

In terms of assessment, perceptions of procedural fairness can be improved by reforms that simplify existing procedures. The laws governing property tax in many low-income countries are inherited from the colonial period, when typically, only a tiny minority of urban properties were liable for the tax. This has resulted in overly-complex valuation systems, often further complicated by fragmented institutional arrangements and inter-agency rivalries (Prichard and Moore 2018). For instance, existing property tax systems are generally based on sending valuation professionals to estimate the market value of properties in the field. But there are few certified valuers, and reliable market data on sales prices are frequently not available. As a result, valuations are highly subjective, and highly opaque to taxpayers. If taxpayers cannot easily understand the basis on which their property value was assessed, it is likely to undermine perceptions of fairness (Prichard and Moore 2018). If valuable properties are routinely under-valued through collusion between frontline officers and wealthy taxpayers, then it is also likely to undermine perceptions of equity. Efforts to simplify property valuation procedures—such as, for example, through area-based or points-based assessment—can improve procedural fairness by making the basis of assessment clearly understandable to all taxpayers, and by making data on assessments transparent and accessible to all.

Appeals processes also play an important role in improving procedural fairness. No matter how well-designed, any property tax system is liable to make mistakes. This may especially be the case for more simplified valuation systems that sacrifice a degree of precision for administrative implementability. An essential component of an effective property tax system is thus an error-correction mechanism, one critical component of which is an established procedure for taxpayers to lodge appeals if they believe their assessment is wrong (Bird and Slack 2007). Such appeal processes usually involve a desk review by valuation staff to correct any factual errors. If differences are not resolved at this stage, then appeals can proceed to a valuation review board comprised of experts in valuation (Bird and Slack 2007). In some countries, there is a third stage where disputes can be further appealed to the courts if they remain unresolved. Although appeals systems are desirable and necessary, in practice they can sometimes inadvertently reduce equity. If appeals processes are cumbersome, slow-moving, or require detailed technical and legal knowledge, then access will be restricted to only wealthier property owners (Bird and Slack 2007). Key to improving perceptions of procedural fairness and equity is thus implementing an appeal process that is relatively simple and low-cost for taxpayers to access.

3.3 Reducing space for harassment

A common complaint levied against local government revenue collection is that it can lead to harassment by tax collectors. Such harassment is most often facilitated by the face-to-face interactions inherent to manual systems of property taxation. Technology-driven reforms that depersonalize interactions and reduce face-to-face contact between tax collectors and taxpayers can thus also reduce space for the type of harassment that reduces perceptions of fairness and trust in the tax system. For instance, reducing face-to-face interactions was one of the explicit goals motivating introduction of the iTax platform by the Kenya Revenue Authority in 2015 (Franzsen and McCluskey 2017c).

IT reforms to reduce in-person interaction often need to be accompanied by legal reform to reduce the complexity of tax systems. Some local governments currently get much of their own-source revenue from “nuisance taxes” that are relatively easy to collect but highly regressive and applied unsystematically (Keen 2012). Nuisance taxes are also often subject to informality and negotiation with tax collectors. The result is an inequitable system in which local governments raise limited revenue, and the bulk of that revenue comes from regressive sources that are susceptible to complaints of harassment (Gallien and Moore 2021). The DRC represents a particularly extreme case of an overly complex local tax system. Research has shown that local governments officially have more than 400 different types of taxes, levies, and fees they are permitted to charge residents (Paler et al. 2017). Unsurprisingly, this complexity contributes to high levels of extraction from taxpayers, with very little of that revenue reaching the government budget, contributing to low levels of trust in government.

Abolishing nuisance taxes, coupled with IT reforms to reduce in-person interaction in property tax administration, are thus key strategies that governments can use to build public trust and broader political support for reform.

3.4 Improving equity

There is now substantial evidence that taxpayers are less likely to comply when they feel that others are not paying enough. For individuals, this behaviour may represent a form of principled resistance to perceived injustice. For businesses, the stakes may be more explicit and economically-grounded; inequality in tax enforcement across firms in the same sector generates pressure on compliant firms to reduce their tax burden to match those of less compliant competitors (Hassan and Prichard 2013). Key areas where governments can focus to improve perceived equity in property taxation are valuation and enforcement.

The concept of "equity" captures two distinct components, both of which affect trust in the property tax system: horizontal and vertical equity. Horizontal equity refers to the idea that similar properties should pay similar amounts of tax (Prichard et al. 2019). Vertical equity asks whether the distribution of the tax burden is equitable across the wealth spectrum. Vertical equity is not objective, depends on societal beliefs about what a "fair" and appropriate vertical distribution should look like (Prichard et al. 2019). Many countries hold to a broad societal belief that property tax burdens should be progressive—that is, owners of more valuable properties should pay higher overall tax bills.

The most conspicuous and problematic horizontal inequity in property taxes in most countries results from outdated valuation rolls, and the high degree of informality and subjectivity inherent to manual valuation techniques (Piracha and Moore 2016). The failure to regularly update property rolls, for instance, can result in large discrepancies in tax bills for similar properties, and in many properties being left completely outside the tax net. Valuation systems that rely entirely on area for the tax base can also result in a significant degree of horizontal inequity, as similarly-sized plots of land can be taxed the same amount, despite one hosting a single-room house and the other a large mansion (Prichard et al. 2019). Reforms that aim to address these sources of horizontal inequity, such as by simplifying valuation procedures to enable regular updating of the property roll, or by shifting the tax base to a hybrid points-based system that accounts for qualitative differences in property quality, can help to improve perceptions of equity, and by extension tax compliance.

When it comes to vertical equity, property taxes have an in-built potential to be progressive in incidence because wealthier people tend to own more valuable properties. However, the progressivity of the property tax system depends on the tax base that is used, along with the willingness of governments to pursue strong enforcement measures against wealthy and potentially politically well-connected property owners. In almost all lower-income countries, however, potentially progressive taxes are (by a significant margin) the least well-enforced major taxes (Kangave et al. 2016). If taxpayers experience a pervasive feeling that enforcement is inequitable, then governments face the dual challenge of both addressing enforcement gaps, and convincing taxpayers that they have actually done so (Prichard et al. 2019). Increasing transparency around what different owners pay is one strategy governments can pursue to improve perceptions of vertical equity. Simplified models of property valuation that use formulas based on observable characteristics—such as points-based valuation—help make the basis for valuation, and thus taxation, fully transparent to taxpayers (Jibao and Prichard 2016). Governments may also wish to pursue targeted enforcement actions towards the largest high-profile defaulters, if the political will is available, to communicate to taxpayers that nobody is able to escape their property tax obligations by virtue of wealth or political connections.

Together, efforts to address both the horizontal and vertical components of equity can improve trust that the tax system is fair, and by extension improve tax morale and compliance.

3.5 Linking service delivery and property taxation

Key to tax compliance are taxpayer beliefs about reciprocity (Feld and Frey 2007). First and foremost, this suggests the importance of linking improved revenue to improvements in services. Such links appear most straightforward and likely where property taxes are raised by local governments—and this may be an important advantage of decentralized property taxation (Goodfellow 2017a). But they remain possible where centrally-administered property taxes are shared with local governments, or even where revenue is fully under central government control (Prichard 2017). Effectively linking service delivery and property taxation also demands effective communication and outreach strategies to ensure that taxpayers understand how service improvements are underpinned by property tax revenue.

Options for linking service delivery and property taxation can run along a continuum from entirely implicit to highly explicit connections. On the implicit side of the spectrum, governments explain that property tax revenue is used to fund government activities, but do not provide detailed information. This may be enough in contexts where taxpayers already trust the government. But in low-trust environments, such implicit links are unlikely to encourage significant voluntary compliance (Prichard 2017).

A common form of transparency employed by governments, which is slightly more explicit, is to provide publicly available information on revenue and spending. But making the connection between property taxation and service delivery clear requires more than simply publishing budget information, as taxpayers will often struggle to understand how new revenues from specific taxes have contributed to improved welfare (Prichard 2017). It can also be challenging, and time consuming, for taxpayers to access and understand local budgets. More important, therefore, are concrete efforts to present revenue and spending information in formats that are easily accessible and understandable to taxpayers. Ghana, for instance, has used online videos to communicate the composite budget system of the local district assemblies to residents (MoFEP 2013).

Elsewhere, governments have been more explicit in proposing that new tax revenue will be used to fund specific new services, and have communicated that information through forums to facilitate interaction between taxpayers and local officials (Prichard et al. Forthcoming). Specific services to be funded with property tax revenue might include, for example, the introduction of new bus or sanitary services. These links are not embedded in law, but may lead taxpayers to associate new revenue with specific popular benefits (Prichard 2017).

The most explicit and strongest form of revenue-expenditure linkage happens when governments formally earmark new property tax revenue; that is, when some or all property tax revenue is explicitly allocated to specific purposes under the law, either indefinitely or for a defined period of time (Prichard 2017). For example, a portion of property tax revenue could be legally dedicated to road repairs, market improvements, specific salaries, public toilets, or some other locally defined priority. The main advantage of such explicit linkages is that they make the benefits of property taxation clear to taxpayers, and may thus increase broader trust in the system, tax compliance, and political support for reform. Their main downside, however, is that they reduce budget flexibility (Prichard 2017). The correct strategy to emphasize links between property taxation and service delivery are thus likely to depend on the circumstances of individual governments.

3.6 Strengthening accountability

The links between tax compliance and accountable governance are expected to run in both directions. That is, one of the justifications often supplied to support increased levels of property taxation is that it has the potential to facilitate bargaining between citizens and their governments that improves accountability (Gadenne 2017; Prichard 2015; Slack 2011). In the other direction, strengthening accountability is expected to yield improvements in tax compliance by increasing overall trust that tax revenues are used effectively to deliver improved services (Prichard et al. 2019). Together, these links are expected to contribute to a virtuous cycle in which property taxes increase accountability, which in turn improves trust in the tax system, leading to higher levels of compliance (Prichard 2015). The importance of accountability in shaping trust in the tax system is reflected most clearly in evidence that reduced corruption, participatory budgeting, and forms of direct democracy (all forms of accountability) are associated with higher tax compliance.

A recent cross-national survey experiment carried out by the World Bank, for example, finds that interventions that increase the salience of anti-corruption efforts and allow citizens to state their expenditure preferences to the government result in sizeable and significant increases in tax morale relative to a control group (Sjoberg et al. 2019). Two studies from Brazil yield similar findings. In one, the authors find that evidence of corruption reduces property tax receipts, and increases demands for participatory budgeting (Timmons and Garfias 2015). A World Bank study, in turn, demonstrates that the presence of participatory governance institutions is closely associated with the ability of municipal governments to raise local tax revenue (Touchton, Wampler, and Peixoto 2019). The research shows that Brazilian municipalities that voluntarily adopt participatory institutions collect significantly higher levels of taxes than other, similar municipalities without these institutions. Research on participatory budgeting in Porto Allegre, Brazil, has likewise concluded that it contributed to a substantial increase in tax revenues (Schneider and Baquero 2006). This finding is echoed by broader research comparing municipalities within and beyond Brazil that finds links between participatory budgeting, decreased tax delinquency, and improved revenues from property taxation (Cabannes 2004). More broadly, research has also argued that tax collection and compliance often increase following the election of new governments, because of renewed popular trust following successful elections (Prichard 2015).

Together, this evidence suggests that efforts to improve accountability—the most ambitious of which would be some kind of participatory budgeting that gives residents a direct say in how property tax revenues are spent—are likely to strengthen perceptions of reciprocity, and in turn tax compliance (Moore and Monkam 2016).

4 Conclusion

Africa is the fastest urbanizing continent on the planet, and local jurisdictions require revenues to support expanded public goods, services, and investments in required infrastructure (Campbell 2018). There is a growing recognition that property taxes remain one of the most under-exploited potential sources of revenue to fill this gap (Fjeldstad 2015). If sub-Saharan countries were to approach the levels of property tax levied in developed countries, as a percentage of GDP, it would represent a dramatic transformation in subnational finance, and substantially increase the possibilities for accountable and transparent local service provision. Beyond increasing local revenues, property taxes can contribute towards the type of explicit tax bargaining between citizens and the state that encourages greater accountability in governance (Prichard 2015).

Achieving these benefits, however, is not straightforward. Reforms to subnational IT systems, hybrid approaches to property assessment, and the use of satellite or drone imagery to identify and map properties are likely to be important ingredients in any successful reform effort (Collier et al. 2018). Just as important, however, is a commitment on the part of political leaders to address the primarily political bottlenecks to property tax reform. Maintaining a focus on simplicity, transparency, and reciprocal service provision within reform efforts may help to strengthen this political commitment (Moore, Prichard, and Fjeldstad 2018).

Citizen trust in the broader system of local governance is a crucial element that is often difficult to address within the narrow constraints of technical reform programs. Drawing explicit links between property tax collection and the broader social contract, mainly in the form of service provision, is thus likely to be an important element in improving the success of property tax reform efforts (Prichard 2017). Drawing out these links can encompass efforts to ensure fairness and equity in the application of new tax burdens. It can also involve the expansion of transparency around both tax collection and expenditures, or the creation of new forums for public engagement such as through participatory budgeting mechanisms for the allocation of new revenues (Moore and Monkam 2016). These kinds of measures can be critical strategies for building a public constituency for reform, while also reinforcing the benefits of improved revenue collection.

Growing awareness of the potential of property taxes, coupled with the many opportunities for technical reform of existing systems, is contributing to meaningful improvements in several countries. The state government in Kaduna, Nigeria has been working to increase tax collection by expanding the tax base, investing in technology and modernization, and implementing large-scale policy and administrative reforms (Verhoeven and Prichard 2019). Lagos state has already rationalized their property tax system, leading to a substantial increase in revenues (Goodfellow and Owen 2018). In Freetown, the capital of Sierra Leone, the city government has recently implemented an ambitious points-based property assessment system, coupled with wide-ranging IT reforms, that has the potential to quintuple revenue (Kamara, Meriggi, and Prichard 2020). In Kananga, DRC, a recent reform of the property tax system increased compliance levels from near-zero to 11.6%, while stimulating greater levels of public participation in forums to discuss local spending priorities (Weigel 2020). Discussions about the parameters of possible property tax reform are also ongoing in several countries, including Benin, Cameroon, Cote D'Ivoire, the Gambia, Malawi, Somaliland, Togo, Uganda, and Zambia. Despite the substantial political and technical challenges, many jurisdictions in Africa are already transforming their systems of local finance, with a focus on the property tax.

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