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Taxing property owners in Dakar

In brief

- Property taxes in the region of Dakar offer a huge potential for local revenue mobilisation, which remains mostly untapped
- Baseline results show that only an estimated 20% of plots are on the tax roll (administrative data), 12% of owners paid the property tax in 2018, and tax payments do not exceed 20% of theoretical tax revenues (survey data)
- The authors partnered with the national tax administration to develop and implement a modernised property tax management system, which is being rolled-out through a randomised control trial (RCT) in the region of Dakar. The system can be extended to other areas of the country after the experimentation phase.
- The programme includes a comprehensive fiscal census, carried out using a new application allowing to automatise data collection in the field, the computation of tax liabilities, and the production of tax notifications. All this is done based on digitised cadastral and address information, to ease the census, tax notification distribution and enforcement processes.
- The application also allows to test a semi-automatised mass valuation method to assess property values.
- The programme involves a stronger cooperation between the national tax administration, in charge of tax assessment and emission of tax notices, the national treasury, in charge of the distribution of tax notices and the collection of payments, and municipalities, the beneficiaries of these tax revenues, also in charge of sensitising taxpayers and assisting in the identification of property owners.
- The roll-out is currently ongoing and will last at least until December 2019.

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Background

In 2014, Senegal adopted its current development plan, "Plan Senegal Émergent", with the main goal of bringing the country to an emerging economy status by 2035. Strengthening domestic revenue mobilisation is among the stated objectives, and more recently, the ambitious goal of bringing the tax-to-GDP ratio from its current level - 15% - to 20% by 2023 was announced by the government.

In this perspective, improving the mobilisation of local taxes and in particular property taxes is crucial in the Senegalese context – as in most countries in the region facing the same challenges – for several reasons, and modernising the property tax system in Dakar, the capital city, could have far-reaching positive effects.

First, recent legal developments have accentuated decentralisation ("Acte III de la Décentralisation" in 2013). As a result, municipalities all across the country have received greater responsibilities. They are now in charge of financing a wider array of local public services and are also commissioned to help raise the revenues allowing to do so.

Second, urban growth is both extremely rapid and erratic, creating the need for investments in services and infrastructure which will ensure Senegalese cities develop in a sustainable way. Not only could property taxes contribute to fund much needed urban planning projects, but their management through modernised systems can also create an important source of information for the authorities in charge of monitoring the booming real estate sector.

Finally, oil and gas reserves discovered off the shore of Senegal will shortly start being exploited, a situation which often creates very high expectations in terms of public revenue. However, it is important to note that estimated revenues from the oil sector amount to 2% of GDP for a twenty to thirty-year period, and the potential of property tax revenues is also estimated to be at around 2% of GDP (IMF, 2019), with the advantage that this source is inexhaustible.

Current challenges impeding the functioning of property taxes in Senegal

1. A declarative tax system with no addressing structure that generates incomplete and outdated information

In theory, all property owners are required to make annual declarations, by submitting to the national tax administration both the address of their property and its annual rental value. However, since such declarations are only made in very small numbers, the bulk of the tax liabilities are simply rolled over from previous years, with no updates in property values. The administration does not have the capacity to properly enforce such a system:

the material and human resources are insufficient to inform property owners of this obligation and to detect owners who do not declare. Furthermore, the administration is not in a position to systematically verify declared values, due to the lack of reliable information on real estate prices. The tax base for property taxes is the annual amount which could be collected if the property was for rent at market prices. While this is could be straightforward to apprehend when the property is actually for rent, the determination of the tax base is more complex when the property or parts of it are not for rent.

This results in a valuation roll that is both incomplete and outdated: baseline data shows that at most, a third of cadastral plots are on the valuation roll, and that rental values listed in the roll are on average lower than values obtained by surveying owners and real estate experts.

Furthermore, although some parts of Dakar benefit from a harmonised addressing system, it is both under-utilised and incomplete. The administration has detailed cadastral information and plot identifiers, but these are not linked to address information that is visible and known by taxpayers. The addresses declared by taxpayers are taken as such, leading to tax notifications which are in some cases extremely difficult to distribute.

2. Absence of a harmonised protocol for fiscal census and taxation activities

To enlarge the tax net and update the valuation roll, the administration is supposed to carry out field activities, property fiscal censuses. These used to happen rarely, and in a way that was not optimal. An important challenge that was noted through qualitative work is the diversity in the procedures carried out within each fiscal center, and the absence of a clear protocol for these field interventions. Information was collected on paper and needed to be typed afterwards. This cumbersome procedure was time consuming and generated an important loss of information. Address information collected in the field by the agents was also imprecise, and not linked to cadastral plot identifiers.

Furthermore, in contrast to the declarative system which prevails when owners comply and submit a declaration to the administration, once agents go in the field and detect non-declarants, the system "shifts" to a presumptive one: the agent is responsible for assessing the rental value of the property. Usually, agents ask the owner or tenants about rents and values, and additionally use their own experience and judgment. We characterise this procedure as "discretionary". Although it presents the benefits of incorporating insights from the agents in the field, it also creates the risk of increasing collusion practices as informal settlements between agents and taxpayers can easily be made with little risks of being caught. Additionally, these field agents often lack the training and expertise to conduct relevant property valuations.

3. Insufficient institutional cooperation between the two ends of the fiscal chain

Finally, another important obstacle to the good functioning of property taxes is the divide in the fiscal chain between assessing and billing activities on the one hand (national tax administration), and distribution and collection activities on the other hand (National Treasury). There is no systematic cooperation between the two institutions. For instance, the Treasury receives the printed valuation roll and tax notifications, but no digitised version. As a result, Treasury officials are obliged to go through all documents manually to verify information (e.g. detection of erroneous or repeated entries) and to prepare the logistics of the distribution (sorting by geographical area). They also end up typing up the valuation roll all over again in their IT system for tracking purposes. They report on paper new information obtained in the field – for instance if an owner moved out or deceased, if a property has been rebuilt, incorrect addresses – but these notes are never systematically compiled and used to update the valuation roll for subsequent years.

Experimental roll-out of a new property tax management system

These challenges contribute in explaining the poor performance of the current property tax system, the new property tax management system seeks to address them and learn from the experiment to tailor a sustainable country-wide taxpayer registration and taxation process. For two years, the project team has worked with the administration to develop a protocol that will streamline the fiscal chain. A local IT firm was contracted to develop the application (Android and Web components), designed collaboratively by the project team, the administration and the developers. An extensive census using the application is being implemented in 97 cadastral sections (treated areas) in the cities of Dakar, Rufisque, Guédiawaye and Pikine. 97 similar cadastral sections are being studied as comparators (control areas), to evaluate the impact of introducing the new system. The results will allow to shed light on the effects of the new programme not only on tax assessments, payments, and compliance, but also on taxpayers' perception of the administration and local government and engagement with the municipality. Effects on rents could be expected, depending on how the fiscal burden is split between owners and tenants.

Policy implications of the new property tax management system

1. Shifting to a fully digitised system comes with a vast array of benefits, but does not solve all the problems of property taxation

The creation of the new application allowing to digitise the different steps

of the fiscal chain brings about many substantial advantages which are at the core of the project: limiting the loss of information and strengthening institutional memory, efficiency gains, new possibilities to monitor activities in real time and to get immediate insights on aggregate statistics, information sharing between the tax administration and the Treasury for enforcement purposes. Importantly, automatisation also allows to link property information with GIS coordinates. In the case of this project, three forms of address information are being connected: GIS coordinates, cadastral plot identifiers, and visible address information (street name and house number). Currently, the new system is being received extremely positively by field agents and their supervisors within the fiscal centers.

However, switching from a manual process to a digitised and partly automatised one involves important prerequisites, which depend on the city's or country's administrative context. In the case of Senegal, the successful development of the application was based on previous efforts in two major directions. First, the starting point of the new system is the cadastral information (detailed administrative territorial divisions and plot identification numbers, which allow to pin down any given plot). This identification system exists since 2012, although the project allowed to digitise, complete and clean up the cadastral data. Second, before designing the indications for the developers, it was necessary to work closely with various actors within the tax administration to agree on harmonised rules and protocols for the fiscal census and taxation process. This was a lengthy process, but an advantage is that since the national tax administration is in charge of these activities, the application is now usable across the whole country.

Furthermore, using tablets and an application does not solve all the problems pertaining to the establishment of a satisfactory tax roll. Here again, these might depend on the country context. In Senegal, the main challenge that remains in spite of the new technology is the need to obtain the detailed identity of the owner (name and ID number), which can only be done thanks to extensive and repeated efforts in the field. Another aspect which requires special attention is mitigating the risks of losing too much information in the transition period: indeed, most taxpayer details the administration possesses cannot be immediately integrated in the new application (either because they are not digitised, or because they lack the correct identifiers). Therefore, various strategies are being deployed to map existing information into the new application. These efforts might need to be pursued beyond the first wave of fiscal censuses.

2. Testing the substitution of field agents' discretion by a semi-automatised mass valuation method

To address the difficulties posed by property valuation in the field by non-expert agents, a formula-based method, integrated in the new application, is being tested in a subset of the targeted areas. For these cases, the field agent enters observable characteristics of the property, and the system computes

an estimated property value based on a previously defined formula. Supervisors in the office can check the submissions, including photos of the properties.

The methodology is akin to CAMA methods used in the US and in South Africa, but was tailored to the Senegalese context in collaboration with the Africa Property Tax Initiative. The approach closely resembles simplified valuation methods being experimented in other African cities, namely Kampala and Freetown. Importantly, the methodology builds on the Senegalese legal definition of cadastral valuation, and on previous experiences of simplified valuation the administration had piloted. For instance, the observable characteristics were mainly drawn from variables already utilised by the administration for cadastral activities. The formula is thus a technical mean to assist and homogenise valuations carried out in the field, without changing their legal grounding nor fiscal implications. The project team and the administration are currently thinking about the best way to combine, in subsequent years, these valuations with declarations made by the minority of owners who do declare. The legal framework suggests that the declaration should override the formula prediction, if the administration considers that the declaration is "legitimate" – but there are imprecisions regarding how this should be assessed. The problem might not exist in settings where the system is presumptive to start with.

The property valuation formula was calibrated thanks to statistical analyses conducted using to data collected in a baseline survey, estimations provided by real estate experts, and satellite images processed by a team of GIS experts, following recent literature in the property valuation field. However, an important aspect of the system is that the formula is fully flexible if future improvements are needed: both the characteristics to be included and the associated coefficients can be changed by the application administrator.

3. Governance framework of the fiscal census: aligning the incentives of the "tax assessor" and the "tax revenue recipient"

In Senegal, national administrations are in charge of the assessment, billing and collection of property tax revenues, but these revenues accrue to local budgets: Cities (Villes) and Municipalities (Communes - which are districts within the Cities). Local governments do not always have transparent information on the amounts collected and the share they will be receiving at the end of the fiscal year. But their implication is extremely fruitful in field activities, because they have a more in-depth knowledge of the area and of taxpayers, and also because their human resources can be mobilised to support the limited staff of the national tax administration. However, in order to be willing to actively engage in the fiscal census, local governments need to know that the taxation cycle will be fruitful and that their revenues will increase.

For this virtuous circle to be established, a recent national policy

(PACASEN) builds on Local Fiscality Commissions which all local governments are supposed to establish, and which are trained and subsequently involved in fiscal census activities under the supervision of the national tax administration. This project is the opportunity to bring this policy orientation into action: before the fiscal census begins in a given municipality, the municipal council is informed and trained by the national tax administration, and is required to conduct sensitisations in the targeted areas. Municipalities then contribute to the fiscal census by making staff and vehicles available for field work.

In this context, it will be interesting to study the effects of the fiscal census on local governance outcomes. Municipalities will be expecting an increase in their budget following the efforts they deployed. Citizens affected by an increased tax pressure may have higher expectations towards their local representatives (neighborhood delegates) and administrations (municipality), in line with the tax bargaining hypothesis. They might also behave differently in upcoming municipal elections (December 2019). This might trigger further policy discussions as the citizens increasingly demand services and accountability from their local representatives.