

# Building Fiscal Capacity in Sub-Saharan Africa: The Role of Local Inequality

March 2021 – No. 32 | UE-AFD Research Facility on Inequalities

### PITCH

Are people's attitudes towards taxation affected by local levels of inequality in the provision of public goods such as electricity, healthcare, and education? New research on sub-Saharan Africa reveals that, on average, citizens who face high levels of local inequality (as measured by data on the intensity of night lights) report more supportive attitudes towards taxation.

The positive contribution of inequality to tax attitudes is observed when computing the intensity of inequality within a surrounding radius of 30 to 40 kilometers from where the taxpayers are located. But the effect fades away when inequality is measured over wider surrounding distances.

The study identifies the poorest parts of the population as being the driving force of the positive contribution of inequality to tax attitudes. This suggests that the result arises from greater demand for redistribution in a context of more pronounced local inequality.

In line with this interpretation, taxpayers also display more favorable attitudes towards taxation in reaction to high levels of local

inequality when they live further away from centers of economic activity.

Importantly, inequality only seems to fuel support for taxes when citizens trust their government, when they perceive corruption as less prevalent, and when they are satisfied with democracy in their home country.

### MOTIVATION

More than half of the population of sub-Saharan Africa currently lives without electricity, among which 80% are located in rural areas (Blimpo and Cosgrove-Davies, 2019)<sup>1</sup>. This suggests that access to electricity and inequality in terms of its delivery are a major challenge for the continent.

Fiscal policies are a key way for developing countries to achieve a fairer income distribution and to provide public services essential to the population. The Third International Conference on Financing for Development (2015) highlighted the importance of mobilizing domestic resources in financing the improvement and extension of public infrastructures. But widespread tax avoidance makes it challenging for most African countries.

Tax compliance is crucial for government efforts to collect taxes,

and people's willingness to pay is shaped by a variety of economic, sociological, and political factors that overall capture attitudes towards taxation. This study focuses on the way in which inequality in local public good provision affects individuals' attitudes towards taxation in 30 sub-Saharan African countries in 2014/15.

Evidence from behavioral economic research suggests that disparities accentuate taxpayers' stress, which in turn might give them incentives to pursue strategies of tax-avoidance (Bloomquist 2003). Studies of the determinants of tax compliance confirm a negative correlation between income inequality and tax compliance (Williams 2017)<sup>2</sup>.

But considering tax compliance as a proxy for demand for redistribution, some researchers also find support for the predictions of 'median voter' analysis, which suggests a positive contribution of inequality to pressure for redistribution (Milanovic 2000)<sup>3</sup>. On the other hand, most of these studies examine a context rather different from sub-Saharan Africa, where the quality of governance is rather weak, and the extent of democracy is limited in some countries (Grundler and Kollner, 2017)<sup>4</sup>.

**Authors** Lisa CHAUVET, Siyavash ESLAMI, Marin FERRY, Laure PASQUIER-DOUMER

**Geography** Sub-Saharan Africa

**Find out more about this project:** <https://www.afd.fr/en/carte-des-projets/understanding-role-taxation-fight-against-inequalities>

**Key words** Inequality – night lights – attitudes towards taxation

**Themes** Inequality – Public finance

## METHODS

The data on tax attitudes in this study come from the sixth round of Afrobarometer surveys conducted in 2014/15. The survey includes a series of questions about respondents' attitudes towards taxation that are comparable across more than 30 African countries.

The researchers choose not to focus on the restricted concept of tax compliance but rather to consider the more encompassing concept of attitudes towards taxation. Their dependent variable is thus a composite measure constructed from questions related to various dimensions of tax morale collected at the individual level, for which Afrobarometer provides the longitude and latitude of the enumeration areas to which they belong.

Using the latest generation of night lights data – Visible Infrared Imaging Radiometer Suite (VIIRS) – the

researchers then construct a Gini index based on light per capita for various buffer zones around each individual's enumeration area for different radii (from 20 to 70 kilometers). The focus on inequality at sub-national levels is motivated by the view that such disaggregation may be more relevant than the national scale since individuals' perceptions of inequality are more likely to be accurate for their surrounding environment based on day-to-day observations.

The researchers' identification strategy relies on an estimation where the instrument is a Gini index computed on predicted pixels' light intensity based on the initial distance of each pixel from its closest enlightened pixel. They then make use of individual characteristics available from Afrobarometer surveys to investigate potential heterogeneity in the effect of inequality in public good provision on attitudes towards taxation.

## RESULTS

The study finds an average positive effect of inequality in 20–50 kilometers buffer areas on attitudes towards taxation. Within countries, respondents living in an area with greater light inequality report significantly more favorable attitudes towards taxation.

The results indicate that the effect mainly stems from people who are at the bottom of the national wealth distribution. Individuals who live in unequal areas also tend to be more favorable towards taxation when they are located further away from the enlightened pixels, in line with the idea that they may benefit more from redistribution.

The researchers also observe that the positive contribution of local inequality to attitudes to taxation is sensitive to trust in institutions and the perception of corruption that Afrobarometer's respondents grant to their fiscal and ruling institutions.

## RECOMMENDATIONS

- ▶ In view of the need to improve domestic resource mobilization in poor African countries, governments may consider improving tax compliance by taking into account the demand for redistribution of taxpayers.
- ▶ Poor citizens who are located at a distance from centers of economic activity should be targeted first in the allocation of public goods such as electricity, healthcare, and education.

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<sup>1</sup> Blimpo, M. P., and Cosgrove-Davies, M. (2019). Electricity access in Sub-Saharan Africa: Uptake, reliability, and complementary factors for economic impact. World Bank Publications.

<sup>2</sup> Williams, C. C. and Krasniqi, B. (2017). Evaluating the individual- and country-level variations in tax morale: evidence from 35 Eurasian countries. *Journal of Economic Studies*, 44(5):816–832.

<sup>3</sup> Milanovic, B. (2000). The median-voter hypothesis, income inequality, and income redistribution: an empirical test with the required data. *European Journal of Political Economy*, 16(3):367–410

<sup>4</sup> Gründler, K. and Köllner, S. (2017). Determinants of governmental redistribution: Income distribution, development levels, and the role of perceptions. *Journal of Comparative Economics*, 45(4):930–962.