

# No Taxation without State-assigned Property Rights

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WIDER Development Conference, Oslo, 2023

## Motivation and Research Question

- Property rights and taxation positively affect development
- But the link between property rights and taxation is under-studied
- Research question: does difference in property rights regimes affect taxation?

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## Property rights on land in Sub-Saharan Africa

- In SSA property rights on land are extremely complex and diverse, but could be categorized into two broad types (Boone 2015, 172)
  - *Statist* property rights regime: “the central state is the land allocator and dispute adjudicator” .
  - *Neo-customary* rights regime: “state-backed local leaders exercise authority... over land allocations and land-dispute adjudication” .

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## Property rights on land in Sub-Saharan Africa

- In SSA countries the average share of land governed by traditional authorities is 59%
- Ranging from 98% in Somalia to 2% in Rwanda
- Does it makes a different for taxation what type of authority assigns/uphold property rights on land?

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# Argument

- It does make a difference
- Why would individuals pay taxes to the state when they depend on the traditional authority to sustain their property rights?
- Hence, where property rights are assigned and upheld by the state, individuals are more likely to assent to pay taxes to support the authority upon which their property rights depend



# Argument

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# Hypothesis

- H1: where the extent of state-led formalization of individual property rights on land is greater, citizens more readily assent to pay taxes to government.

## Empirical approach

- Empirical setting: SSA
- Country- and individual-level analyses

## Country-level Analysis

- 37 SSA countries, 1980-2015, unbalanced panel
  - IV: extent and quality of cadastre as a measure of state-led formalization of individual property rights on land
  - DV: Share of taxes on individuals (income tax) in GDP
- Main specification: up to four lags of DV, country and time fixed effects

# What is cadastre?

- Cadastre is a public record containing information on
  - (a) land/real estate asset
  - (b) the party that holds (c) interests over the asset
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## Cadastre measure

- Was there a state-administered cadastre? (0/1)
- Was the cadastre narrative or cartographic? (1/.75)
- How much of the country's territory was covered by the cadastre? (f.e .2)
- We compute the *Cadastre* indicator for every country/year by multiplying all three score components by one another
- Cadastriated state and customary land is not included, only individual property rights

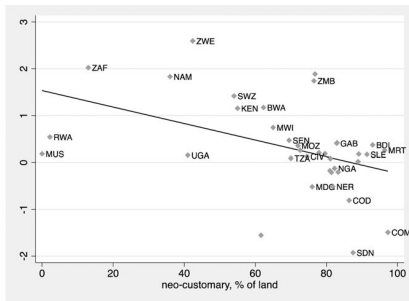
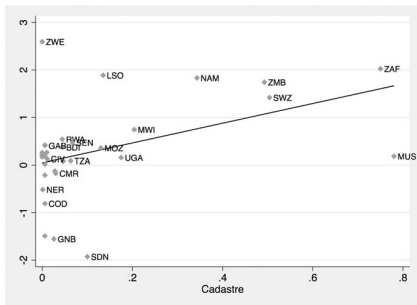
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# Cross-country Analysis: bi-variate association



## Cross-country Analysis: Results from panel analysis

	DV: (log) revenue from taxes on individuals			
	1	2	3	4
<i>Cadastre</i>	0.60** (0.23)	0.51* (0.29)	0.48* (0.26)	0.40 (0.31)
$Y_{t-1}$	0.78*** (0.04)	0.88*** (0.09)	0.89*** (0.10)	0.86*** (0.07)
$Y_{t-2}$		-0.12 (0.09)	-0.12 (0.11)	-0.10 (0.11)
$Y_{t-3}$			0.01 (0.06)	0.11 (0.09)
$Y_{t-4}$				-0.07 (0.05)
Long-run effect	2.79*** (0.94)	2.16** (1.02)	2.23** (0.93)	1.98* (1.02)
Observations	762	710	659	608
Countries in sample	39	39	39	39

- Transition from no cadastre to a full cadastre leads to c. 0.5 percentage point instantaneous increase of revenue from this tax
- Long-term effect is 2-2.8 percentage points increase

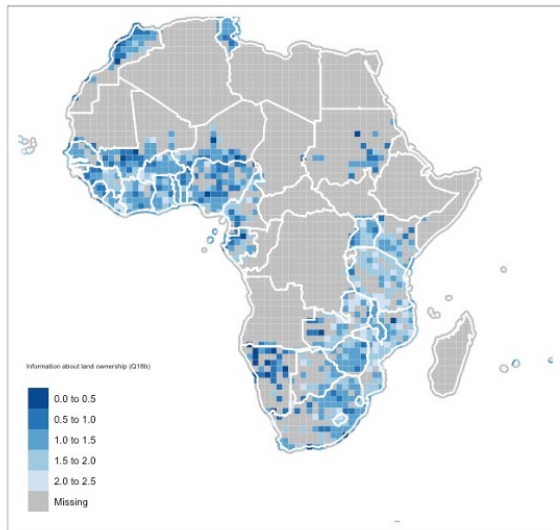
## Cross-country Analysis: Results

- Positive association between the extent of state-assigned individual property rights on land and revenue from taxes on individuals
- But we are not able to test the postulated mechanism: property rights – consent to taxation – tax revenue
- We test the *property rights – consent to taxation* link with individual-level data

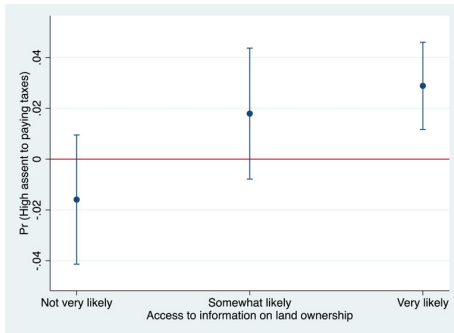
## Individual-level Analysis

- Data: 7th round of the Afrobarometer surveys; 42,000 individuals from 32 SSA countries
  - DV: assent to pay taxes
  - IV: How likely it is that if the respondent went to government office to find out who owns a piece of land in their community, they could get this information? (Access to information on land)
- Method: ordered probit regression

## Access to information on land



# Results



- Individuals who are “very likely” to find information from the government about land ownership in their communities are also more likely to agree with the statement that the government has the right to make people pay taxes

## Conclusion

- The type of public authority assigning/upholding property rights matter for the strength of the fiscal contact
- State-assigned/upheld property incentivize citizens to respond to the state's tax demand as this supports the authority underpinning their property rights
- We find empirical evidence to this claim in country- and individual-level data from SSA



## Conclusion

- The magnitude of our estimates suggests that state-led formalization of property rights on land is not the most potent answer to the fiscal problems of SSA countries
- Even full cadastrification would not allow the median SSA country to address the need for 19% of GDP to finance SDGs by 2030

## Future research

- More work is need to account for different types of traditional authorities and state authorities at different levels
- Better data: f.e. Afrobarometer doesn't measure respondents property ownership situation
- Improvement in causal identification

- Thank you!
- Questions