

# Building Tax Capacity at Scale: Evidence from Technology Investments in Ghana

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# Outline

- ❖ Motivation
- ❖ Research agenda
- ❖ Baseline survey and findings
- ❖ The next steps and conclusion

# Limited tax capacity is a key constraint on development

- ❖ Low tax collection capacity limits ability to provide public goods
- ❖ Direct implications for productivity and sustainable development
- ❖ Tax collection capacity constraints are severe in the local governments
- ❖ Internally Generated Funds (IGF) are way too low:
  - ❖ The typical MMDAs collect, on average 4.2 cedis per resident in 2017
  - ❖ Less than 20% of total expenditure

# Joint policy-research engagement

- ❖ Policymakers engagement with MoF, MLGRD and OHLGS
- ❖ General consensus:
  - ❖ Low tax capacity limits the scope for decentralization and development
  - ❖ local taxation has strong revenue potential
- ❖ It is not obvious which policies will realize this potential cost-effectively and sustainably
- ❖ We set out a joint research-policy agenda to find innovative ways to improve local tax capacity

# Joint policy-research agenda

- ❖ What are key constraints to raising revenue in Ghana's local governments?
- ❖ What is current cost of collection, and what determines the cost?
- ❖ What are the revenue returns to investments in tax capacity?
- ❖ What are the impacts of such investments on expenditures?

# Baseline survey

- ❖ Covered 2016 MMDAs, Sep-Dec 2017
- ❖ 5,300 respondents,
  - ❖ From Chief Executives, Coordinating Directors down to Revenue Collectors
  - ❖ A random sample of residents in each local district capital
- ❖ Comprehensive information on revenue mobilisation process

# The good news

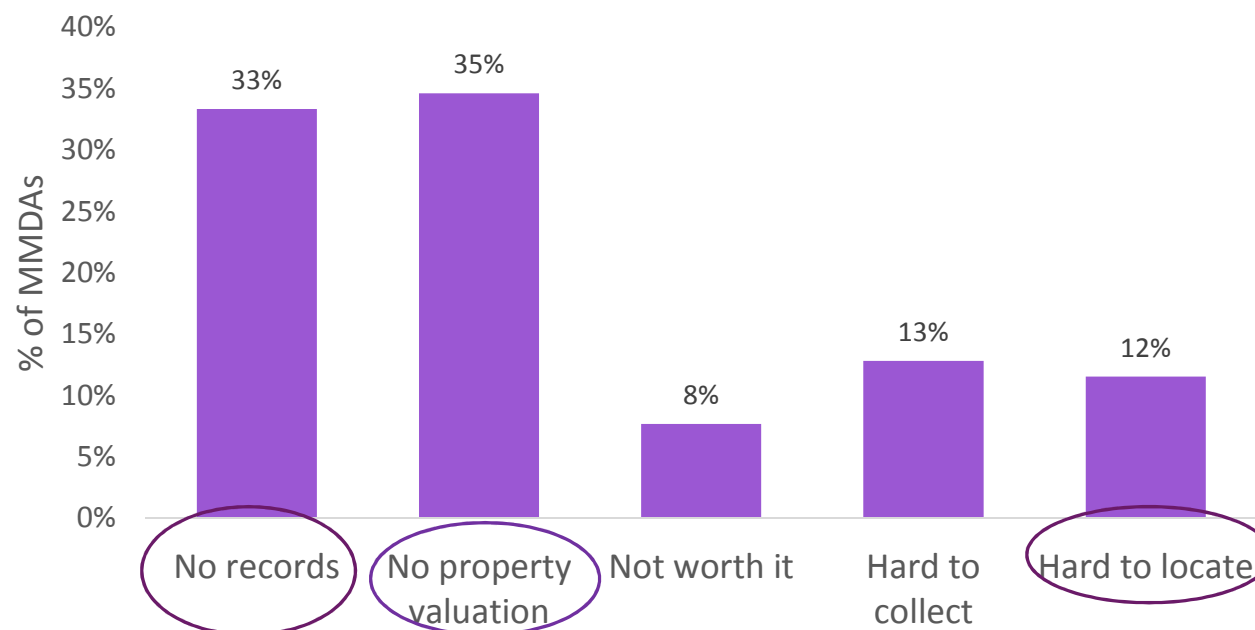
- ❖ Strong legal framework is in place
- ❖ Compliance rate: 74% of properties pay their tax bill before end of fiscal year
- ❖ Human capital in the MMDAs

	Local Government	
	Political Leaders	Management
College graduate (%)	76.1	75.4
Post-graduate (%)	39.8	39.1
Years at current position	7.6	8.79
Years in local government	5.87	12.64

## Billing capacity is low

- ❖ The average MMDA estimate that they bill < 50 percent of properties
- ❖ 76% of the property rates are made based on presumptive basis

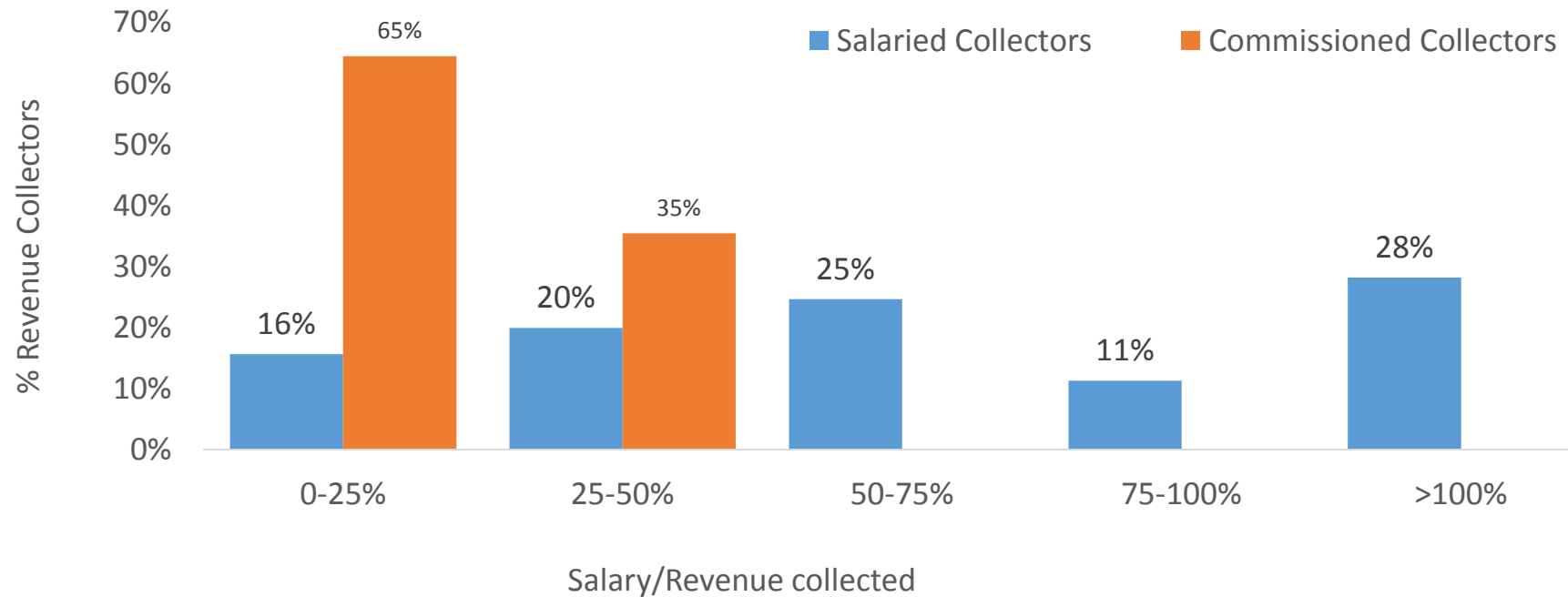
❖ Why?





# Cost of collection is very high

❖ Average cost of collection is 55% of revenue

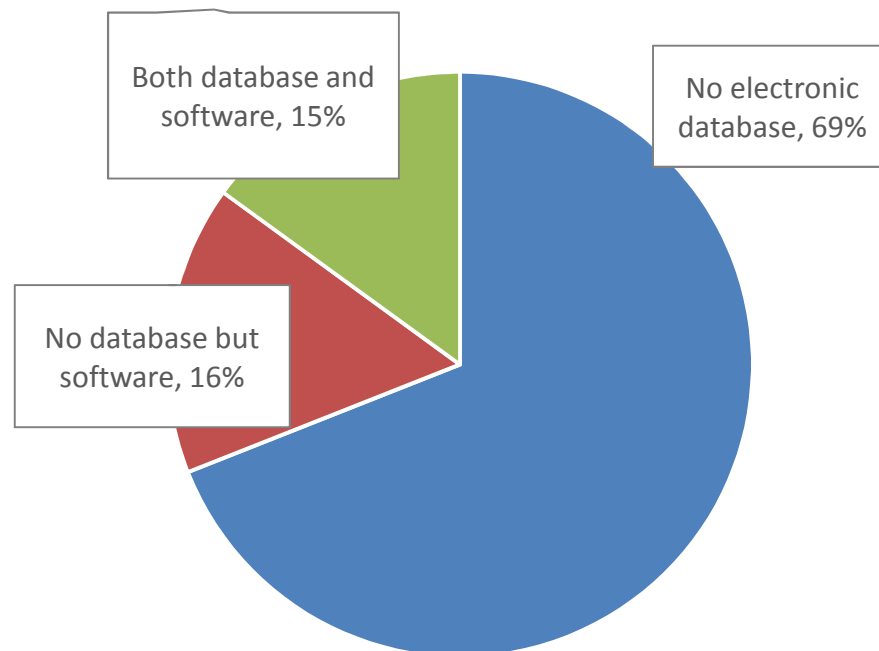


# Most MMDAs do not use technology

❖ Two-third of the MMADAs relies solely on hand written records



❖ 15% of MMDAs have both electronic database and revenue management software



# Technology use is associated with higher IGF

- ❖ We compared districts that use technology to similar districts that do not
- ❖ Assemblies with technology send **23% more demand notices**
- ❖ Assemblies with technology collect **83% more IGF**

# Appropriately designed technology can help address constraints

- ❖ Reduced cost of acquiring rate payer information and increased coverage
- ❖ Valuations: up-to-date base maps speeds up process of assessment
- ❖ Management of collectors: increase monitoring of individual collectors' activities
- ❖ Reduce cost of collection by increasing efficiency, and hence make collection more worthwhile overall

## Policy recommendation?

- ❖ Appropriately designed IT systems has a potential to alleviate constraints on local tax capacity. (APTI, 2017)
- ❖ Countries such as Burundi, Tanzania, Rwanda, Nigeria (Lagos State), Sierra Leone, Cote d'Ivoire, Senegal and Malawi have all invested in such IT-solutions
- ❖ But there is no well-identified evidence on the returns to such investments.

## Next phase: Implement ERMS across randomly selected MMDAs

- ❖ Collaborate with government partners and local private firm to implement a newly-developed IT solution
- ❖ Randomize order in which local governments are offered the IT-solution
  - ❖ Sample: 65 local governments, covering 7.25 million residents
- ❖ Randomizing at scale increases confidence in external validity
  - ❖ Policy relevant for other governments across Africa
- ❖ Evaluation
  - ❖ Administrative revenue data combined with end-line survey
  - ❖ Time window: 18-24 months

## Next phase: Evaluation

- ❖ Revenue performance
  - ❖ Overall local tax collection (hypothesize  $>0$  effect)
  - ❖ Coverage rate and compliance rate ( $>0$ )
- ❖ Cost of collection
  - ❖ Number of salaried revenue collectors ( $>0$  or  $<0$ )
  - ❖ Salary as a % of revenue collected ( $<0$ )
- ❖ Expenditure and citizen engagement
  - ❖ Types of local public goods ( $>0$  or  $<0$ )
  - ❖ Citizen awareness of tax system ( $>0$ )
  - ❖ Citizen engagement and satisfaction with local government ( $>0$ )

## But we are planning for failure

- ❖ Intervention began in July 2018.
- ❖ Monitoring up take-up
- ❖ Elicit feedback in first months of engagement with treatment districts
- ❖ At the moment, end-line aimed for January 2020



## Conclusion

- ❖ A strong tax capacity is necessary for a nation building
- ❖ Strong local tax capacity is critical to the wider agenda of decentralization
- ❖ Appropriately designed IT systems has a potential to improve local tax capacity.
- ❖ We seek to document impact of IT-systems on:
  - ❖ IGF performance
  - ❖ Cost of collection
  - ❖ Expenditure and citizens engagement
- ❖ Very grateful for any comments, suggestions, thoughts:  
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