

Think WIDER Webinar | UNU-WIDER | 22 November 2022

Harnessing big data and ICT to boost revenues

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Chair: Jukka Pirttilä



Evidence based policy-making

Variation

Policy

Data



Evidence



Context in African countries

- Even low-income African countries now have extensive data sets in digital format on tax
 - efiling
 - Electronic Fiscal Devices (EFDs)
- Revenue authorities already use ICT to assess the riskiness of taxpayers
 - Risk profilling



Risk based tax examination in Tanzania

- ICT can be a powerful tool for risk assessment by revenue authorities
- A pilot study in Dar es Salaam introduced a risk-based non-audit approach for identifying which taxpayers to examine
- Results?
 - Moderate increase in additional reported income = revenues
 - But how long will the results last…?



Withholding VAT in Zambia

- In 2017, Zambia introduced WVAT mechanism by which an appointed agent withholds & remits to ZRA the full VAT on payments made to a supplier of goods and services.
 - Data compiled by WVAT agents serves as a check on input purchase on return forms to prevent false claims compels supplies to file their returns.
 - Easy verification of vat claims from electronic records.
 - WVAT mechanism adds an extra layer of deterrence.

Results:

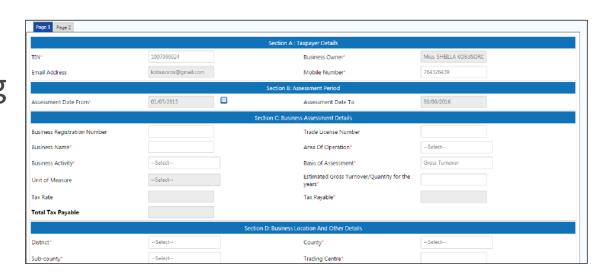
- Reported sales and value added of the treatment firms increased post reform.
- Improved compliance due to a change in the reporting mechanism of VAT.



From Excel to Online filing in Uganda

Change in ICT

- Simplified the form and online filing
- No complicated excel sheets required



Results

- Increase in tax revenue
- Number of tax filers increase (declaring the minimum)



Harnessing Big data

- Electronic filing and increased use of ICT
 - Improved information collected
 - More complete data
 - Follow taxpayers across the tax system over time
- Anonymized tax data are now being accessed in a secure way in labs in SA and Uganda.
 - Unique collaboration with Revenue authorities.
- Modernization of ICT improves data accessibility



Ways to improve data

- Cross checks, more 3rd party information
- Random audits (to train risk engines)
- Technical fixes to ICT systems
- Improve staff technical capacity
 - Data Science



Bigger picture!

- Much of tax administrative work relates to leveraging ICT solutions to enhance tax capacity
- In the wake of e-filing even in low-income African countries, big administrative data sets can be used to improve tax processes and collections

UN SDG 17.1

"Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection"

17 PARTNERSHIPS FOR THE GOALS





Policy panel discussion

Giulia Mascagni (ICTD)

Allen Nassaga (URA)

Timo Laukkanen (Finnish Tax Administration)

Question and Answers

Send your questions through the chat button or use the 'Raise your hand' (option in the *reaction* tab)

Remember to say your name and let the chair know to whom your question is directed.



Thank you for joining!

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