Harnessing big data and ICT to boost revenues

Presenter: Amina Ebrahim
Panellists: Giulia Mascagni (ICTD), Allen Nassanga (URA), Timo Laukkanen (Finnish Tax Administration)
Chair: Jukka Pirttilä
Evidence based policy-making

Policy

Data

Evidence

Variation
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 profiling
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”
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.
This webinar recording will be added on the UNU-WIDER YouTube channel and on our website.

UPCOMING WIDER WEBINARS
Tuesday 13 December
Ravi Kanbur & Jukka Pirttilä
Social protection and taxation in crises

Tuesday 7 February
Kunal Sen & Rose Ngugi
Domestic savings shortfall in developing countries – what can be done about it?

Thank you for joining!

Think WIDER Webinar | 22 November 2022
Harnessing big data and ICT to boost revenues