# Colloquium

### Organized by:

DEPARTMENT OF MATHEMATICS & STATISTICS

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BRIDGING THE GAP: UNVEILING THE POTENTIAL OF TANZANIA'S SMMES THROUGH VAT INSIGHTS

#### Speaker: Amina Ebrahim

#### DEPARTMENT OF SOCIAL SCIENCES



Amina Ebrahim is a Research Fellow at UNU-WIDER. She is a focal point for the <u>Domestic Revenue Mobilisation</u> programme and the Research lead for the project on Tax Research for Development at UNU-WIDER and based in Helsinki. Her research interests span labour and public economics, with a keen focus on harnessing the power of large administrative tax data to drive impactful research in developing countries. Amina has ongoing tax-related projects across Tanzania, Rwanda, Uganda, and Zambia.

#### **Abstract**

The VAT collection plays a role in achieving positive domestic revenue objectives through improved and reformed taxation, but VAT gap estimation is infrequently conducted in developing countries. This study uses novel tax declaration and audit data to conduct a bottom-up estimation to measure the extent of VAT misreporting in Tanzania. We use a machine learning approach to predict evasion

on unaudited firms and periods. This calculation measures the underreporting component of the tax compliance gap: the additional revenues raised if output VAT is complete, input VAT is correctly applied, and the assessment is correct. We document evidence of the firm's strategic behaviour to avoid excessive auditing, thereby increasing the possibility of evasion. Those firms show the greatest VAT gap in the data. Using the machine learning approach, we estimate a VAT gap of 62 per cent for small, micro- and medium-sized enterprises in Tanzania. Finally, we provide a cost-benefit ratio to understand the cost-effective measures to redistribute resources. While it appears more cost-effective to audit sectors with a substantial VAT gap, we suggest that sectors with a larger contribution to the overall VAT gap be considered for increased revenue.

## **Refreshments will be provided!**