Note on replication files

Date: 2 May 2023

Data availability

The core data sets used in this paper are owned by the Kenya Revenue Authority. These are confidential data extracted from administrative tax records with restricted access. We are thus unable to share the data alongside the publication. The complementary UNComtrade data set used in our analysis are publicly available and can be downloaded in bulk here: https://comtrade.un.org/Data/bulk. We harmonise all HS codes to align with the HS Nomenclature 2012 Edition.

Replication code

The analysis was executed in Stata 17 and Python 3.9.1 using a 32GB RAM Windows computer. The individual steps of the analysis are outlined in the file `master_file.do`. The replication code has four components:

1. `00_compute_rolling_firm_network.do`
    - This file uses the monthly firm network data derived from the administrative tax records to create a 12-month rolling network, which we use to compute a firm's exposure to international supply chains and to assess its domestic network.
2. `00_master_customs_data_XM_shares_shock_measures.do`
    - This master file summarises and executes all relevant do-files to compute country-product shares based on the transaction-level customs records and to compute world demand and supply shocks based on the UN Comtrade data.
3. `00_full_Rnetwork_exposure_measures_master.do`
    - This master file summarises and executes all relevant do-files to each firm's full exposure to international supply chains and related shocks. It draws on the shock measures from the previous step and the 12-months rolling adjacency matrix.
4. `00_analysis_master.do`
    - This master file summarises and executes all relevant do-files to implement the main analysis using the measures derived above and the balanced monthly firm panel derived from the administrative tax records.