Replication Package

Paper: Does Urbanization Cause Crime? Evidence from Rural-Urban Migration in South Africa
Authors: Nelly Exbrayat, Victor Stephane.
Journal: Journal of Urban Economics, 2025.

Overview

The code and datasets in this package replicate all tables and figures provided in the paper. The code was run on Stata 16.

Dataset list

Data file	Notes	Provided
Do_Main.do	List all commands to replicate Figures 1, 2, A1, A2, F1, F2 and Tables 1, 2, 3, A1, A3, B2, B5, C1, C2, E1, E2, G1, G2, G3, H1, I1.	Yes
Do_TableH2.do	List all commands to replicate Table H2.	Yes
ES_db.dta	Serves as an input for Figures 1, 2, A1, A2, F1, F2 and Tables 1, 2, 3, A1, A3, B2, B5, C1, C2, E1, E2, G2, H1, I1. G1, G2, G3.	Yes
ES_FigureD1.dta	Serves as an input for Figures D1.	Yes
ES_shares.dta	Serves as an input for Table B5.	Yes
ES_shift.dta	Serves as an input for Table H1.	Yes
ES_Table4.dta	Serves as an input for Table 4.	Yes
ES_TableB1.dta	Serves as an input for Table B1.	Yes
ES_TableB3.dta	Serves as an input for Table B3.	Yes
ES_TableB4.dta	Serves as input for Tables B4.	Yes
ES_TableB6.dta	Serves as input for Table B6.	Yes

ES_TableB7.dta	Serves as input for Table B7.	Yes
ES_TableB8.dta	Serves as an input for Table B8.	Yes
ES_TableH3.dta	Serves as an input for Table H3.	Yes
ES_TableH4.dta	Serves as an input for Table H4.	Yes
ES_TableG1_nids.dta	Serves as an input for Table G1.	Yes

Software requirements

- Stata, Python 2.7.
- The following Stata commands should be installed: reghdfe, ivreghdfe, ols_spatial_HAC, spmap, parmest, boottest.
- The stata-tex package (available here: https://github.com/paulnov/stata-tex) should be installed.

Instructions to Replicators

- Download the data files referenced above.
- Open Do_main.do and edit the working directory path (line 11).
- Run Do_main.do.
- Open Do_TableH2.do and edit the working directory path (line 11).
- Run Do_TableH2.do.

Data Availability and Provenance Statements

Summary of Availability

- ☒ All data **are** publicly available.
- ☐ Some data **cannot be made** publicly available.
- ☐ **No data can be made** publicly available.

Details on each Data Source

1. The raster used to delineate urban areas (Urban Extent of Africa 2010) can be downloaded from: https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/RUNZJD
2. The raster used to measure population from WorldPop and can be downloaded from: https://hub.worldpop.org/geodata/listing?id=29
3. The dataset providing crime statistics can be downloaded from: https://www.saps.gov.za/services/crimestats.php
4. The dataset providing police stations locations and boundaries can be downloaded from: https://www.saps.gov.za/services/boundary.php
5. The Victims of Crime Survey data can be downloaded from: https://www.datafirst.uct.ac.za/dataportal/index.php/catalog/StatsSA/?page=1&sk=VCS&sort_order=asc&ps=100&repo=StatsSA
6. The 2011 Census can be downloaded from: http://www.datafirst.uct.ac.za/dataportal/index.php/catalog/485
7. The 2016 Community Survey can be downloaded from: https://www.datafirst.uct.ac.za/dataportal/index.php/catalog/611
8. The NIDS data can be downloaded from: http://www.nids.uct.ac.za/
9. The South African National Land Cover can be downloaded from the EGIS platform of the Department of Forestry, Fisheries and the Environment: https://egis.environment.gov.za/gis_data_downloads