

Unemployment impact of network sectors and employment protection legislation reforms: Evidence from selected African countries

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This document describes the contents of the replication package associated with the article: file organization, required data, required software and Stata commands, and the role of each script provided.

1. Folder structure

The delivered archive is organized as follows:

```
Unemployment impact of network sectors and employment
protection legislation reforms/
├── datasets/
│   └── MAIN_DATASETS.dta
├── programs/
│   ├── descriptive_stats.do
│   ├── Fig5_and_TableB1.do
│   ├── Fig6_and_TableB2.do
│   ├── Fig7_and_TableB3.do
│   ├── Fig8_and_TableC1.do
│   ├── Fig9_and_10.do
│   ├── Fig11.do
│   ├── Fig12.do
│   ├── Fig13.do
│   └── Fig14.do
├── figures/      (graph output .pdf / .png)
└── tables/      (table output .csv / .tex / .xlsx)
```

Before running a script, edit the following line at the top of each .do file so that it points to the local location of this folder:

```
global homedir "/path/to/your/folder"
```

The other globals (\$datasets, \$tables, \$figures) are derived from \$homedir and do not need to be changed — they refer respectively to the datasets/, tables/ and figures/ subfolders above.

2. Data

All scripts start from the same file:

```
$datasets/MAIN_DATASETS.dta
```

This is a country-year panel (identifiers `cid`, `year`) covering a sample of African countries, including:

- the unemployment indicator (`wdi_unempilo`) and its breakdowns by gender/age: `wdi_unempfne`, `wdi_unempmilo`, `wdi_unempyilo`, `wdi_unempmilo`;
- labor-market reform indices (`labor_market_reform`, components `labor_vg`, `labor_pi`, `labor_fc`, `labor_rm`, `labor_cd`);
- network-sector reform indices — electricity and telecommunications (`product_market_reform`, `prdm_elec`, `prdm_tel`);
- reform-episode/shock indicators (`ftreat_light_labor`, `ftreat_light_prdm`, `treat_light_labor`, `treat_light_prdm`);
- a set of macroeconomic and institutional control variables (see `$covar`, section 4).

3. Software and user-written commands required

Tested under Stata 19.5 (uses `xtset`, `xtcloglog`, `margins`). Install the following user-written commands beforehand — they are not shipped with Stata:

Package	Installation	Role
<code>estout</code>	<code>ssc install estout, replace</code>	<code>esttab</code> , <code>eststo</code> — formatting of regression tables
<code>sutex</code>	<code>ssc install sutex, replace</code>	Summary-statistics table exported to LaTeX
<code>xtsc</code>	<code>ssc install xtsc, replace</code>	Driscoll-Kraay panel standard errors (Hoechle)
<code>grc1leg</code>	<code>ssc install grc1leg, replace</code>	Combine graphs with a single shared legend
<code>balancetable</code>	<code>ssc install balancetable, replace</code>	Covariate balance tables
<code>ebalance</code>	<code>ssc install ebalance, replace</code>	<code>ebalfit</code> — entropy balancing

`roctab`, `xtcloglog`, `margins`, `collapse` and `graph combine` are official Stata commands and do not require installation.

4. Common global macros

Each script redefines the same globals at the top (duplicated rather than centralized, so that each file remains self-contained and can be run independently):

Global	Content
<code>\$covar</code>	Controls: human capital (<code>lpwt_hci</code>), inflation, election cycle, crises, IMF program (IMF55), <code>polity2</code> , trade openness, Gini, GDP growth, reform indices
<code>\$reform1</code> / <code>\$reform2</code>	Continuous-change reform indices — labor market / network sectors
<code>\$shock1</code> / <code>\$shock2</code>	Reform-episode indicators (binary treatment)

Global	Content
\$yvar1	Dependent variable: unemployment rate (overall or disaggregated by gender/age)
\$min / \$max	Horizon of the local projections (0 to 5 years)

5. Description of the scripts

The table below summarizes, for each script, which figures/tables of the article it produces and the method used:

File	Produces	Content
descriptive_stats.do	Table 2; Figures 1, 3, 4, A1	Descriptive statistics (sutex); evolution of reforms by sector and by country; reform episodes by year and by country.
Fig5_and_TableB1.do	Figure 5; Table B1	Local projections (LP-OLS) of the effect of reforms — as a continuous change and as episodes — on unemployment, horizon 0-5 years.
Fig6_and_TableB2.do	Figure 6; Table B2	ROC curves and propensity-score overlap plots; covariate balance table before/after weighting.
Fig7_and_TableB3.do	Figure 7; Table B3	Causal effect (IPWRA, Lunt et al.) of reform episodes on unemployment.
Fig8_and_TableC1.do	Figure 8; Table C1	Same approach as Fig7, with the propensity score estimated by entropy balancing (ebalfit) — AIPW.
Fig9_and_10.do	Figures 7, 9, 10; Table B3	Robustness checks: propensity-score truncation, Teulings & Zubanov (2014) method, joint reforms (labor + network), counter-reforms.
Fig11.do	Figure 11	Leave-one-country-out robustness: re-estimation excluding each country in turn.
Fig12.do	Figure 12	Effect of reforms on labor-market margins (employment-to-population ratio, total/male/female labor-force participation).
Fig13.do	Figure 13; Table 3	Heterogeneity by gender and age (youth/adult, male/female unemployment).
Fig14.do	Figure 14; Table B3	Transmission channels (MIMIC, inward FDI, TFP, gross fixed capital formation).

6. Suggested execution order

The scripts are independent (each one reloads MAIN_DATASETS.dta) and can be run in any order. The order below follows the structure of the article:

```
descriptive_stats.do
Fig5_and_TableB1.do
Fig6_and_TableB2.do
Fig7_and_TableB3.do
Fig8_and_TableC1.do
Fig9_and_10.do
Fig11.do
Fig12.do
```

```
Fig13.do  
Fig14.do
```

7. Notes

- The scripts use preserve / restore around each block of graphs: they modify the in-memory sample (collapse, auxiliary variables) without altering the source data.
 - Several figures share the same intermediate output file name (e.g. figure7.pdf, table3.csv) across scripts; run the scripts one at a time and archive or rename the outputs if you want to keep all of them simultaneously.
 - The names used in gr rename and graph export follow the figure/table numbering of the article; refer to the table in section 5 to match each output to its published figure or table.
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For any questions about replication, please contact the corresponding authors of the article.