

# README replication package “Being on the Frontline? Immigrant Workers in Europe and the COVID-19 Pandemic”

## Overview

The code in this replication package constructs the analysis files from the three data sources 1) EULFS2018/2019/2020; 2) Eurostat lfsq\_ergacob, migr\_imm3ctb, lfsq\_urgacob, and lfsq\_pgacws 3) Google trends using Stata. Two files in the `build` directory clean the EULFS microdata (restricted) and generate the main analysis file. 17 files in the `share` directory run all of the code to generate figures and tables in the paper. The replicator should expect the code to run for about 2 hours.

## Data Availability and Provenance Statements

### Public use data not provided

Data on the employment and unemployment rates, activity rate, migrant flows and stocks were downloaded from Eurostat. Data can be downloaded from <https://ec.europa.eu/eurostat/databrowser/explore/all>

### Free use data with required registration, extract not provided

The paper uses data from the EU Labour Force Survey Waves 2018/2019/2020. Data is subject to a redistribution restriction. Visit <https://ec.europa.eu/eurostat/web/microdata/european-union-labour-force-survey>, for more information on how to apply for the data.

## Computational requirements

- Stata (code was last run with version 16.1)
  - esttab (as of 2022-12-15)
  - gtools (as of 2022-12-15)
  - reghdfe (as of 2022-12-15)
  - eurostatuse (as of 2022-12-15)
  - mplotoffset (as of 2022-12-15)
  - labmask (as of 2022-12-15)
  - coefplot (as of 2022-12-15)
  - labutil (as of 2022-12-15)
  - b1x2 (as of 2022-12-15)

- iebal<sub>tab</sub> (as of 2022-12-15)

### Description of programs/code

- Program in `build/1-data_creation.do` will reformat the 2020 wave of the EULFS and create the source data for the analysis. The file `build/2-dataset_for_analysis.do` will clean the source data, label variables, and create the analysis dataset.
- “`share/1-eurostat_data_import.do`”, imports the series on employment rates (ERGACOB) directly from the Eurostat repository and produces graphs using these data
- “`share/2a-descr_2020.do`”, produces all descriptive scatterplots for the job characteristics on 2020 data.
- “`share/2-descr_2019.do`”, produces all descriptive graphs for the job characteristics on 2019 data.
- “`share/3-risk_measures.do`”, regresses our four risk measures on the probability of job loss and produces tables and figures reporting our main results.
- “`share/4-multi_years_2018-2020`”, performs all the analysis using multiple years.
- “`share/5-disempl_by_year.do`”, regresses our four risk measures on the probability of job loss and produces figures reporting the predicted probability of job losses from 2018 to 2020
- “`share/6-alt_outcomes.do`”, produces regressions for alternative outcomes (e.g. hours worked, wages and incomes)
- “`share/7-geo_subgroups.do`”, produces main regressions differentiating by origin in subgroups.
- “`share/8-alt_outcomes_fig.do`”, performs all the analysis using data for the years 2018/2020 for our alternative outcomes.
- “`share/9-robustness.do`”, produces robustness checks of our main regressions.
- “`share/10-region.do`”, reproduces our main results with region fixed effects.
- “`share/11-table_descriptives.do`”, produces tables of descriptive statistics for our sample.
- “`share/12-gelbach.do`”, produces Gelbach’s (2016) decomposition for the inclusion of risk index, occupation and industry.
- “`share/13-balance_test.do`”, creates a table for the balance test of the unemployed between 2020 and 2019/2018.
- “`share/14-net_migr_rates.do`”, show the immigration (`migr_imm3ctb`) from the Eurostat repository and produces graphs.

- “share/15-unemp\_rates.do”, imports the series on unemployment rates (URGACOB) directly from the Eurostat repository and produces graphs using these data.
- “share/16-stock\_migrants.do”, imports the series on the stock of migrants (PGACWS) directly from the Eurostat repository and produces graphs using these data.
- “share/17-google\_trends.do”, imports the google search trends for our occupation characteristics and produces the graph for its evolution.

### Instructions to Replicators

- Edit 00\_setup.do to adjust the default path
- Run 00\_setup.do once on a new system to set up the working environment.
- Run 00\_setup.do to run all steps in sequence.