

# **Simulating Aggregate and Distributional Effects of Minimum Wage Increases in Romania: Evidence from Survey and Administrative Tax Data**

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## **REPRODUCIBILITY PACKAGE README**

This reproducibility package replicates estimates the results reported in the paper.

### **Data availability statement**

- Tax administrative data is strictly confidential and provided by the Romanian Ministry of Finance, as a result of a strong collaboration. There is no standard procedure to request the data, as the data is not made publicly available.
- Romanian EU-SILC data was accessed using normal procedures. For more information, go to: <https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions>

### **The package is organized as follows:**

#### **1. Data:**

Monthly tax data to produce descriptive statistics, and run the simulation. Two monthly data files were excluded due to the quality issues.

This folder is not shared in the reproducibility package due to the legal constraints on the data sharing.

#### **2. Data\_ready**

This folder includes:

- Tax files with the simulation outcomes (two scenarios). There are not shared in the reproducibility package due to the legal constraints on the data sharing.
- EU-SILC data
- This folder includes also the outcomes of recalculation saved in dta files.

#### **3. Code:**

- a) 0. EU\_SILC\_poverty – file producing few statistics needed to estimate living wage
- b) 1. Descriptive statistics – calculates descriptive statistics presented in the first tables and figures
- c) 2. Simulation Scenario One – runs the first simulation scenario
- d) 3. Simulation Scenario Two – runs the second simulation scenario
- e) 4. Recalculation only employed – recalculate results for the sample of those who keep their employment and saves mean income across age groups in postfiles.
- f) 5. Simulation Tables and Figures – runs the calculation for Tables and Figures, which are not based on the simulation Excels
- g) 6. Confirmation of automatically expored results – confirms the results stored in Excel

4. **Outputs and logs:** Excel files with outputs for tables 5 and 7 and with code logs.

#### Calculations in Excel and code results

Exhibits were generated in the file “Master Excel 03252024.xlsx” from code results or other sources.

Exhibit	Generation in Master Excel	Results in code or other sources
Figure 1	Fig 1 Evolution of MW	Not produced by code. Sources: Romanian Ministry of Public Finance and Eurostat.
Figure 2a	Fig 2a Minimum-to-median ratio	Not produced by code. Sources: Romanian Ministry of Public Finance, OECD, and Eurostat.
Figure 2b	Fig 2b Ratio MW to mean media	Not produced by code. Sources: Romanian Ministry of Public Finance, OECD, and Eurostat.
Table 1 – Panel a	Table 1. DG Food Basket	Not produced by code. Own estimates based on Romanian Food Basket; <a href="https://op.europa.eu/en/publication-detail/-/publication/7cd42604-b82f-11e5-8d3c-01aa75ed71a1/language-en">https://op.europa.eu/en/publication-detail/-/publication/7cd42604-b82f-11e5-8d3c-01aa75ed71a1/language-en</a>
Table 1 – Panel b	Table 1. DG Food Basket	Not produced by code. Sources are Romanian Food basket from Panel a and Food Inflation from Eurostat

		<a href="https://ec.europa.eu/eurostat/databrowser/view/prc_hicp_midx_custom_10770183/default/table?lang=en">https://ec.europa.eu/eurostat/databrowser/view/prc_hicp_midx_custom_10770183/default/table?lang=en</a>
Table 1 – Panel c	Table 1. DG Food Basket	Same as Table 1 – Panel b
Table 2	Table 2. Estimate of Living wag	Same sources as Table 1 and results on pages 1-2 of log “0.EU_SILC_poverty.pdf”
Table 3	Table 3. Distribution Gross Wag	Page 1 of log “Descriptives.pdf”
Figure 3	Figure 3. Histogram	Page 1 of log “Descriptives.pdf” (image was copied to the Excel sheet)
Figure 4	Figure 4 share MW time	Pages 1-10 of log “Descriptives.pdf”
Figure 5	Figure 5 share MW secto	Pages 10-11 of log “Descriptives.pdf”
Figure 6	Fig 6. share MW firm size	Pages 11-12 of log “Descriptives.pdf”
Figure 7	Fit 7. Share MW cohort	Pages 12-16 of log “Descriptives.pdf”
Figure 8	Fig 8. Share MW Nuts 3	Pages 16-18 of log “Descriptives.pdf”
Table 4	Table 4. Wage elasticities	Not produced by code. Source: Lichter, A., Peichl, A., & Siegloch, S. (2015). The own-wage elasticity of labor demand: A meta-regression analysis. <i>European Economic Review</i> , 80, 94-119.
Table 5	Table 5. Scena 1 LM Outcomes	Pages 1-8 of log “6.Confirmation_exported_results.pdf” and pages 320-324 of log “4.Recalculation_only_employed”.

		These results were first copied to “Romania_MW_sim_tax_1_third_run.xlsx” for further calculations and from there to “Master Excel 03252024.xlsx”
Table 6	Table 6 Scena 1 Distributional	Pages 1-2 of log “5.Simulation_Tables_Figures.pdf”
Table 7	Table 7. Scena 2 LM Outcome	Pages 8-15 of log “6.Confirmation_exported_results.pdf” and pages 324-329 of log “4.Recalculation_only_employed.pdf”  These results were first copied to “Romania_MW_sim_tax_2_third_run.xlsx” for further calculations and from there to “Master Excel 03252024.xlsx”
Table 8	Table 8 Scena 2 Distribution	Pages 3-6 of log “5.Simulation_Tables_Figures.pdf”
Table 9	Table 9. Who is affected	Pages 6-7 of log “5.Simulation_Tables_Figures.pdf”
Figure 9	Figure 9. Scena 1 LR Imp sector	Pages 7-10 of log “5.Simulation_Tables_Figures.pdf”
Figure 10	FIG 10 MW NUTS3	Pages 10-15 of log “5.Simulation_Tables_Figures.pdf”