README

for Supplementary Material of

Unequal Wage Cyclicality: Evidence, Theory, and Implications for Labor Market Volatility

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1 Section2_SIPP

This folder provides the data and Stata codes used for the empirical analysis based on SIPP microdata in Section 2 of the paper.

1.1 Data Storage

The raw SIPP data should be stored in the following subfolder:

`Section2_SIPP/files/ceprdata/sipp/rawdata`

1.2 Master File Execution

The main folder contains the master file

`SIPP_master.do`.

Running this file will execute all necessary codes. The generated figures and tables will be saved in:

`Section2_SIPP/files/ceprdata/sipp/output`

1.3 Correspondence with Paper Figures and Tables

The outputs correspond to the figures and tables in the paper as follows:

- **Figure 1 (a)**: `wage_ump_main_no_FE`
- **Figure 1 (b)**: `wage_ump_main`

Online Appendix:

- **Figure C.1**: `wage_ump_separate`
- **Figure C.2 (a)**: `wage_ump_job_changers_no_FE`
- **Figure C.2 (b)**: `wage_ump_job_changers`

- **Table C.1**: `table_FD_No_FE.tex`
- **Table C.2**: `table_FD_main_FE`
- **Figure C.3**: `wage_ump_occupation`
- **Table C.3**: `table_FD_robust`

All codes are written in Stata 18.

2 Section4_Model

This folder provides the data and Matlab codes used for the quantitative analysis based on the search model in Sections 4–5 of the paper.

Main Execution File

The main execution file is:

`main.m`

Running this file will automatically perform the following tasks:

- Model calibration
- Simulation using `simulation_replacement_hiring.mod`
- Simulation using `simulation_replacement_hiring_FBzero.mod`
- Figure generation using `figure_draw.m` and `figure_draw_FirmFBzero`

Note: To run this file successfully, Dynare 5.0 must be installed and the `addpath` in `main.m` should be set appropriately to include the Dynare directory. Dynare can be downloaded from: `https://www.dynare.org/download/`

2.1 US_data_table_1964

This subfolder contains the codes used to compute the business cycle statistics reported in Panel (A) of Table 3 (*US data*). The corresponding output is provided in the `Statistics_data.text` file, with the upper block of the file matching Panel (A) of Table 3.

The main execution file is:

`USdata_table.m`

Correspondence with Paper Figures and Tables

- **Table 3**: `aggregate_table.tex`
- **Table 4**: `aggregate_table_wages_extend.tex`
- **Figure 3**: `Teck_shock_main`
- **Figure 4**: `Teck_shock_wages2`
- **Table 5**: `aggregate_table_cf_FirmFBzero.tex`

3 Section4_Model2

This folder provides the data and Matlab codes used for Figure 2 and D.1.

Main Execution File

The main execution file is:

`main.m`

Correspondence with Paper Figures and Tables

- **Figure 2**: `wage_sd_gamma`

Online Appendix:

- **Figure D.1**: `wage_sd_kappa`

Note: To run this file successfully, Dynare 5.0 must be installed and the `addpath` in `main.m` should be set appropriately to include the Dynare directory. Dynare can be downloaded from: `https://www.dynare.org/download/`

4 Appendix_LEHD

This folder provides the codes and data for the analysis of job-to-job transitions based on LEHD, as reported in Appendix B of the paper. The main execution file is:

`New_hires_share.m`

Correspondence with Paper Figures

- **Figure B.1**: `EEhiresShare`