Replication package for:
Are Tax Cuts Contractionary at the Zero Lower Bound? Evidence from a Century of Data

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This package reproduces the figures and tables contained in "Are Tax Cuts Contractionary at the Zero Lower Bound? Evidence from a Century of Data".

1 Main files

1.1 Files to produce all the main results

- `PriorPredictive/Figure1.m`: Matlab file to produce Figure 1.
- `mainRun.do`: Stata file to produce the results for Figures 3-8, Appendix Figures A5-A24 and Table 1.
- `MatlabFiles/RunFigures.m`: Matlab file to produce Figures 2-8 and Appendix Figures A5-A24.
- Figure A1-A4: Run `FigureA1.m`, `FigureA2.m`, `FigureA3.m` and `FigureA4.m` in the folder `PriorPredictive`.

1.2 Folder structure

- `DoFiles`: Contains all the Stata do files called by `mainRun.do`.
- `MainData`: Folder containing all the main time series data for analysis.
- `MatlabFiles`: Contains all the Matlab files called by `RunFigures.m`.
- `NarrativeShocks`: Folder containing the quarterly narrative shock series.

- `PriorPredictive`: Contains all the Matlab files and Dynare mod files to run the prior predictive analysis.
- `StataOutput`: Contains the output for all Stata results.
- `Tables`: Contains the results for Table 1.

2 Instructions

All results can be reproduced by running the main files listed in Section 1.1 in order. The Stata codes `mainRun.do`, `Table1.do` and `runAll.do` require specific information on the project directory in the code line: `global projectdir "CDHReplicationPackage"`.

3 Computational requirements

3.1 Software requirements

- `Matlab:` Matlab replication files were produced using version 2024a.
- `Dynare: Figure 1` and `Figure A1-A4` require the software package `Dynare 5.5`. For the medium-scale model some draws might need to be excluded when Occbin does not find a solution. To ensure that the code runs and discards these particular draws, it requires to replace `solver.m` in the folder `../dynare/5.5/matlab/+occbin` with the one in the folder `PriorPredictive`. Or, alternatively, comment out line 64 and line 88 in the matlab-file `solver.m`, to prevent that the function `print_info([...])` is called.
- `Stata:` Results were produced using Stata 18.

3.2 Memory and runtime requirements

- The code was last run on a 10-core Intel Core i9-based desktop with 64GB of RAM and running Windows 11.
- Approximate time needed to reproduce the analyses: Figure 1 and Appendix Figures A1-A4 run approximately 15 minutes each. Producing all empirical results in Figures 2-8, Appendix Figures A5-A24 and Table 1 takes approximately 6 minutes.

4 Data Availability Statement

All data needed to reproduce the main results are contained in the replication package. The Online Appendix lists the data sources and provides detailed information on the data construction. The main data files in the replication package are summarized below.

- `MainMacroData.xlsx`: Main time series data.
- `AnnualData.xlsx`: Annual time series data used for data construction of the main time series.
- `QuarterlyData.xlsx`: Quarterly time series data used for data construction of the main time series.