

# Description of the Replication Files for “Linear IV Regression Estimators for Structural Dynamic Discrete Choice Models”

Myrto Kalouptsi<sup>\*</sup>, Paul T. Scott<sup>†</sup>, Eduardo Souza-Rodrigues<sup>‡</sup>

Harvard University, CEPR and NBER, NYU Stern School of Business, University of Toronto

February 2020

Our replication codes and data are located in the zip file `ReplicationFiles_ECCP.zip`. This file includes the following two folders:

1. **MonteCarlo**: It includes all relevant files to reproduce the Monte Carlo results for the dynamic demand for a durable good model presented in Section 6.
2. **TaxiEmpirics**: It includes the relevant codes and data files to reproduce the results of the empirical application presented in Section 7.

The **MonteCarlo** folder contains the following files:

- `mcgo.sh`: a shell script that can run the Monte Carlo simulations (in Matlab) and then format the output (in Mathematica). The final outputs are three tables in LaTeX format: `tableBasic.tex` (table 2), `tableWithXi.tex` (table 3), and `tableLRE.tex` (table E1). Note: directory paths should be updated before running.
- `MC_main.m`: sets up and looping over specifications for Monte Carlo simulations (MATLAB)
- `MCgo.m`: main file performing Monte Carlo simulations (MATLAB)
- `set_params.m`: sets parameters for simulations (MATLAB)
- `tables.m`: collects the results from the Monte Carlo simulations (MATLAB).

---

<sup>\*</sup>Department of Economics, Harvard University, Littauer Center, Cambridge, MA 02138, myrto@fas.harvard.edu

<sup>†</sup>Stern School of Business, New York University, Kaufman Management Center, 44 W. 4th St., New York, NY 10012, ptscott@stern.nyu.edu.

<sup>‡</sup>Department of Economics, University of Toronto, Max Gluskin House, 150 St. George St., Toronto, Ontario M5S 3G7, Canada, e.souzarodrigues@utoronto.ca

- `tables.nb`: formats tables in LaTeX for inclusion in the draft (Mathematica).
- Minor files (see comments within files for descriptions): `discretize.m`, `estTrans.m`, `getCCP.m`, `HMgo.m`, `HM_simple.m`, `index.m`, `lrd.m`, `lre.m`, `lre_simple.m`, `MCrun.m`, `MCrun_full.m`, `paramvec.m`, `paramvec2.m`, `regIV.m`, `regOLS.m`, `regOLSFull.m`, `regressions.m`, `sim_markov.m`, `stationary.m`, `stationary_dist.m`, `transition.m`, `trueTrans.m`, `vf_solve.m` (MATLAB)

The `TaxiEmpirics` folder contains the files:

- `TaxiEmpirics_Data.dta`: It is the taxi drivers data set.
- `TaxiEmpirics_ECCP.do`: It is the STATA do-file that organizes the data, generates the summary statistics (Table 4), and estimates the parameters of the taxi drivers' dynamic supply model (Table 5) presented in Section 7.