EMPLOYMENT PROTECTION LEGISLATION AND INFORMALITY: THEORY AND EVIDENCE FROM INDIA

Replication Package README

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1. Data

This project uses multiple rounds of the Annual Survey of Industries, National Sample Surveys, and the Economic Census as described in Section 4 of the paper. These data are publicly available from the Ministry of Statistics and Program Implementation, Government of India.

2. Software

The data cleaning and analysis uses Stata/MP 16.1 Version and MATLAB 2023a. All the required ado files that require user-written packages have also been provided. The master files will automatically add these in so that the replicator does not need to install any additional files.

3. Hardware and Run-time

The code has been compiled with a Macintosh Pro 2023 computer. It takes 3:58 minutes to run.

4. Global File Paths

Each user must supply information on the path in three master files:

- For Stata: in the code/Master.do line 22.

- For Matlab: in the code/estimation/master.m, line 18-20

5. Sequence of Compiling Master Files

There is a sequence that needs to be followed to be able to replicate the results in the paper. First, the estimation files (in MATLAB), followed by the analysis files (in STATA). The details are as follows:

a) Run "code/estimation/master.m". This will execute in MATLAB and proceed with all the estimation and calibration of the model parameters.

b) Run "code/master.do". This will execute in STATA and reproduce all the tables and figures in the main paper, as well as online appendices.

6. Replication Codes for Tables and Figures in the Paper

The list below provides the relevant codes that reproduce the tables and figures in the paper. To be able to compile them for comparison, the user can run the master.do file and then use ***Tables and Figures.tex*** file that is provided in the output folder.

Main paper

- Figure 1: Theoretical Implications of Penalizing Contract Workers: ***Theory.m***
- Table 1: Summary Statistics from the ASI Data: ***ASI_regressions_main.do***
- Table 2: Overlap Across Measures of Informality: ***nss_regressions.do***
- Figure 2: Impact of the Policy on the Use of Contract and Regular Workers: ***ASI_regressions_main.do***
- Table 3: Impact of the Policy on Contract, Payroll and Total Workers in Formal Sector Firms: ***ASI_regressions_main.do***
- Table 4: Impact of the Policy on the Probability of Working in the Informal Sector and Daily Wages: ***nss_regressions.do***
- Table 5: Impact of the Probability of Firms Remaining Unregistered: ***ec_firm_regs.do***
- Table 6: Entry-Exit into the Formal Sector: ***ASI_entry_exit.do***
- Table 7: Impact of Employment Protection Policies: ***calibration/analysis.do***

Appendix

- Figure A1: Fraction of Informal Workers and EPL Enforcement: ***global_des.do***
- Figure A2: Fraction of Workers and Firms in the Informal Sector: ***ec_sumstats.do***
- Table A2: Event Study Regression: ***ASI_regressions_main.do***
- Figure A3: Impact of the Policy on the Use of Contract and Regular Workers: ***asi_regressions_longdata.do***
- Table A3: Impact on Core and Non-Core Activities: ***ASI_regressions_main.do***
- Table A4: Results After Restricting the Control States to Neighboring States Only: ***ASI_regressions_main.do***
- Table A5: Results After Excluding Neighboring States: ***ASI_regressions_main.do***
- Table A6: Impact of the Policy Using Synthetic Control Weights: ***synthetic_control_asi_collapsed_final.do***
- Table A7: Robustness of ASI Results to Alternate Fixed Effects: ***ASI_regressions_main.do***
- Table A8: Robustness of Results to Not Using Sampling Weights: ***nss_regressions.do***
- Table A9: Excluding Self-Employed Individuals from the NSS Analysis: ***nss_regressions.do***
- Table A10: Alternate Definitions of Informal Workers
- Table A11: Event Study using the NSS: ***nss_regressions.do***
- Table A12: Heterogeneity by Manufacturing and All Sectors: ***nss_regressions.do***

- Table A13: Impact on LFP, Unemployment, and Agricultural Work: ***nss_regressions_lfp.do***
- Table A14: Robustness to Alternate Definitions of Large Firms: ***ec_firm_regs.do***
- Table A15: Robustness to Restricting Results to the Manufacturing Sector Only: ***ec_firm_regs.do***
- Table A16: Correlation between Firm-Size and Contract Workers: ***calibration/lcorrelation.do***
- Figure A4: Correlation between Firm-Size and Contract Workers: ***calibration/lcorrelation.do***
- Table A17: Model Fit: ***calibration/modelfit.do***
- Table A18: Derivatives of Moments to Parameter Changes: ***calibration/derivatives.do***
- Figure C1: Distribution of Contract Workers Across Occupations in Formal Firms: ***nss_occdist.do***
- Figure C2: Size-Based Penalty Function: ***ProbabilityFunction.m***