Affirmative Action, Faculty Productivity and Caste Interactions: Evidence from Engineering Colleges in India

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Replication Files Guide

This document maps CSV data files to the tables and figures in the paper.

Main Tables

Table	Title	CSV File(s)
3.1	Faculty and Student Characteristics in Engineering Colleges in India	`main/faculty_national.csv` (Faculty) `main/students_national.csv` (Students)
5.1	Faculty Qualifications by Reservation Status	`main/faculty_national.csv`
5.2	Returns to Education by Reservation Status	NSS Microdata (see instructions below)
5.3	Faculty Differences and Balance Checks (Random Assignment Sample)	`main/random_assignment.csv`
5.4	Regressions for Student Course Grades (Quality of Instruction)	`main/random_assignment.csv`
5.5	Regressions for Follow-on Course Grades and Test Scores	`main/table_55_semester.csv` (Model 1) `main/table_55_course.csv` (Model 2) `main/table_55_skills.csv` (Model 3)

Table	Title	CSV File(s)
5.6	Regressions for Additional Educational Outcomes	`main/table_56_attend.csv` (Model 1) `main/random_assignment.csv` (Models 2-3) `main/table_56_research.csv` (Model 4)
5.7	Additional Educational Outcomes (Second Cohort)	`main/table_57.csv`
5.8	Regressions for Number of Publications per Year	`main/faculty_national.csv`
5.9	Regressions for Funding Received	`main/faculty_national.csv`
5.10	Regressions for Administrative Positions Held	`main/faculty_national.csv`
5.11	Course Grades: Reservation Faculty × Reservation Students	`main/random_assignment.csv`
5.12	Course Grades: Teacher-Like-Me Interactions	`main/random_assignment.csv`
5.13	Course Grades: Detailed Reservation Groups (SC/ST, OBC)	`main/random_assignment.csv`
5.14	Course Grades: Same Reservation Category Group	`main/random_assignment.csv`

Appendix Tables

Table	Title	CSV File(s)
A1	Descriptive Statistics (NSS Micro Data)	NSS Microdata (see instructions below)
B1	Faculty and Student Characteristics (Random Assignment Sample)	`main/random_assignment.csv`
C1	Course Assignments by Faculty Reservation Status	Panel A: `appendix/table_C1_a.csv` Panel B: `main/random_assignment.csv` Panel C: `appendix/table_C1_c.csv`
D1	Reservation and General Category Student Differences	`main/students_national.csv`
E	Value-Added Measures of Faculty Productivity (Figures)	`appendix/figure_E.csv`
F1	Weekly Hours Spent on Teaching-Related Activities	`main/random_assignment.csv`

Table	Title	CSV File(s)
F2	Teaching Practices Inventory Measures	`main/random_assignment.csv`
G1	Main Results without Student Fixed Effects	`main/random_assignment.csv`
G2	Inverse-Weighted Observations by Classroom Size	`main/random_assignment.csv`
G3	Disaggregated Reservation Groups	`main/random_assignment.csv`
H1	Follow-on Grades and Test Scores (Interactions)	`main/table_55_semester.csv` `main/table_55_course.csv` `main/table_55_skills.csv` `main/students_national.csv` `main/random_assignment.csv`
H2	Additional Educational Outcomes (Interactions)	`main/table_56_attend.csv` `main/random_assignment.csv` `main/table_56_research.csv`
I1	Balance Checks (Second Cohort of Students)	`appendix/table_I1.csv`
I2	Additional Outcomes with Interactions (Second Cohort)	`main/table_57.csv`
J1	Number of International Publications per Year	`main/faculty_national.csv`
J2	SCI, EI or SSCI Publications per Year	`main/faculty_national.csv`
J3	Government Funding Received	`main/faculty_national.csv`
J4	Private Funding Received	`main/faculty_national.csv`
J5	Research, Funding, and Administration (Student-Course Level)	`main/random_assignment.csv`

Appendix Figures

Figure	Title	CSV File
E1	PDFs of Faculty Fixed Effects	`appendix/figure_E.csv`
E2	CDFs of Faculty Fixed Effects	`appendix/figure_E.csv`

NSS Microdata Instructions

Tables **5.2** and **A1** use microdata from the 68th Round of India's National Sample Survey's Employment and Unemployment Survey.

Steps to Replicate:

1. **Download** the microdata setup from:
   https://microdata.gov.in/NADA/index.php/catalog/127/study-description
   (Reference ID: DDI-IND-MOSPI-NSSO-68-10-2013)

2. **Install** NESSTAR's Extraction Software (included with the microdata download)

3. **Extract** each block as a `.dta` file into the source folder

4. **Run** the Stata do-file `NSS_tables.do` to replicate the tables

Code Files

File	Description
`R_code.Rmd`	R Markdown file with all replication code
`R_code.md`	Rendered markdown output
`NSS_tables.do`	Stata do-file for NSS microdata tables

Requirements

R Packages

```
pacman::p_load(
  haven, estimatr, extrafont, texreg, janitor, hrbrthemes,
  xtable, papeR, tidyverse, Hmisc, skimr, datawizard,
  lme4, lattice, broom, fixest, lfe, survey, patchwork, mfx
)
```

Stata

Required for NSS microdata replication only.