# Catch up, Mismatch and Learning: Some Evidence from India

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#### Motivation

- Affirmative action (AA) policies used to advance disadvantaged.
- Intense debate over impact of AA on intended beneficiaries.
- Do college admission preferences help minorities?
- Compared to the US, India offers a better environment to measure effect of preferences.

#### Work on AA in EEIs in India

- In Indian elite educational institutions (EEI):
  - Transparent admission criteria, extreme preferences, rigid course structure.
  - Reservations: SC/ST take the JEE with general students but 15% and 7.5% of the seats in *each major* are reserved for SC and ST students, respectively.
  - Gap between SC/ST and their non minority peers is greater in selective majors.
  - Extreme preferences: admission cut-off scores of 50% for SC/ST vs 97% non SC/ST.

#### Data

- 453 students graduating in 2008.
- Three sources of data:
  - Institutional records: GPA and credits by semester, gender, caste, age, and major.
  - Exit survey: schooling, parents' education, family income, first wage after graduation, among others.
  - JEE applicant data 2009: 384,977 applicants for 8295 seats

#### Questions

- Targeting
  - Are quotas working?
  - Are they consistent with helping underprivileged get into college?
- Catch Up
  - Are minority students catching up?
- Mismatch
  - Do minority students gain from going to selective majors?
    - Wages?
    - Stress Levels?

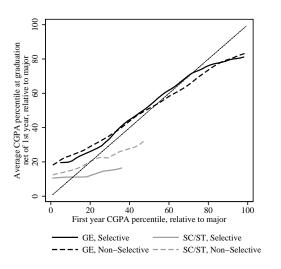
## **Targeting**

- Over 90% of SC/ST applicants would not have gotten in without reservations.
- Minority students come from poorer districts compared to those they displace.

### Catch Up

- Arcidiacono et al. (2011): Evolution of GPA over time is not enough to measure catch up.
  - Variance of grades within a major changes over time.
  - Grading criteria across majors may differ.
- We look at final performance by initial percentiles within a major
- For example, if SC/ST start up in the 20th percentile and end up in the 10th percentile we can say they are falling behind.

# Catch Up



■ Flatter curves for SC/ST (falling behind), more so in selective majors.

# Wage Gains from Selective Majors

- Problem: Selection
  - Better students go to better majors
  - Higher wages could be due to selection and not a major choice

# Mean Wage Differences in Dollars between Selective and Non-Selective Majors

	Mean	Controlling for
	Differences	Selection
GE	3600***	3130
SC/ST	1400*	-1790**

#### Social Mismatch

Mean Differences in Stress Levels between Selective and Non-Selective Majors

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	Mean	Controlling for
	Differences	Selection
GE	0.17	-0.08***
SC/ST	0.88**	0.12**

- In both GE and SC/ST, people in selective majors are more stressed out.
- SC/ST more stressed because of selective majors and less so for GE.

### Summary

- Evidence on minority students falling behind, labor market mismatch, and social mismatch.
- Suggests such extreme preferences may not even be in the interest of SC/ST: lower wages and more stress.
- However, our work on Turkey brings hope: the disadvantaged learn more (and faster) when they are allowed to retake college entrance exam.