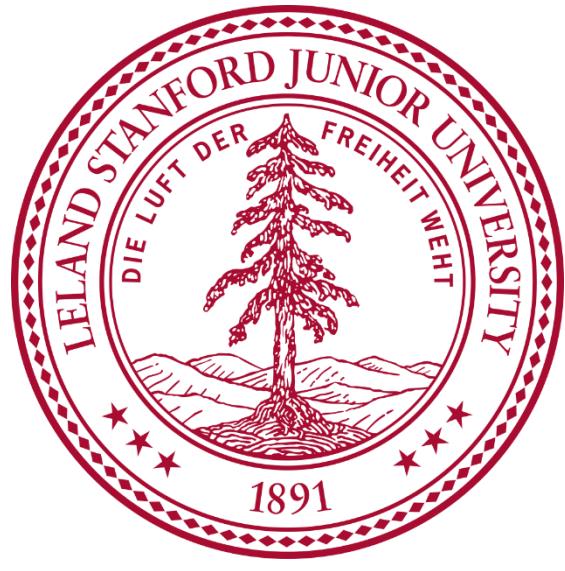


May Affirmative Action Increase Academic Achievement in Brazil?



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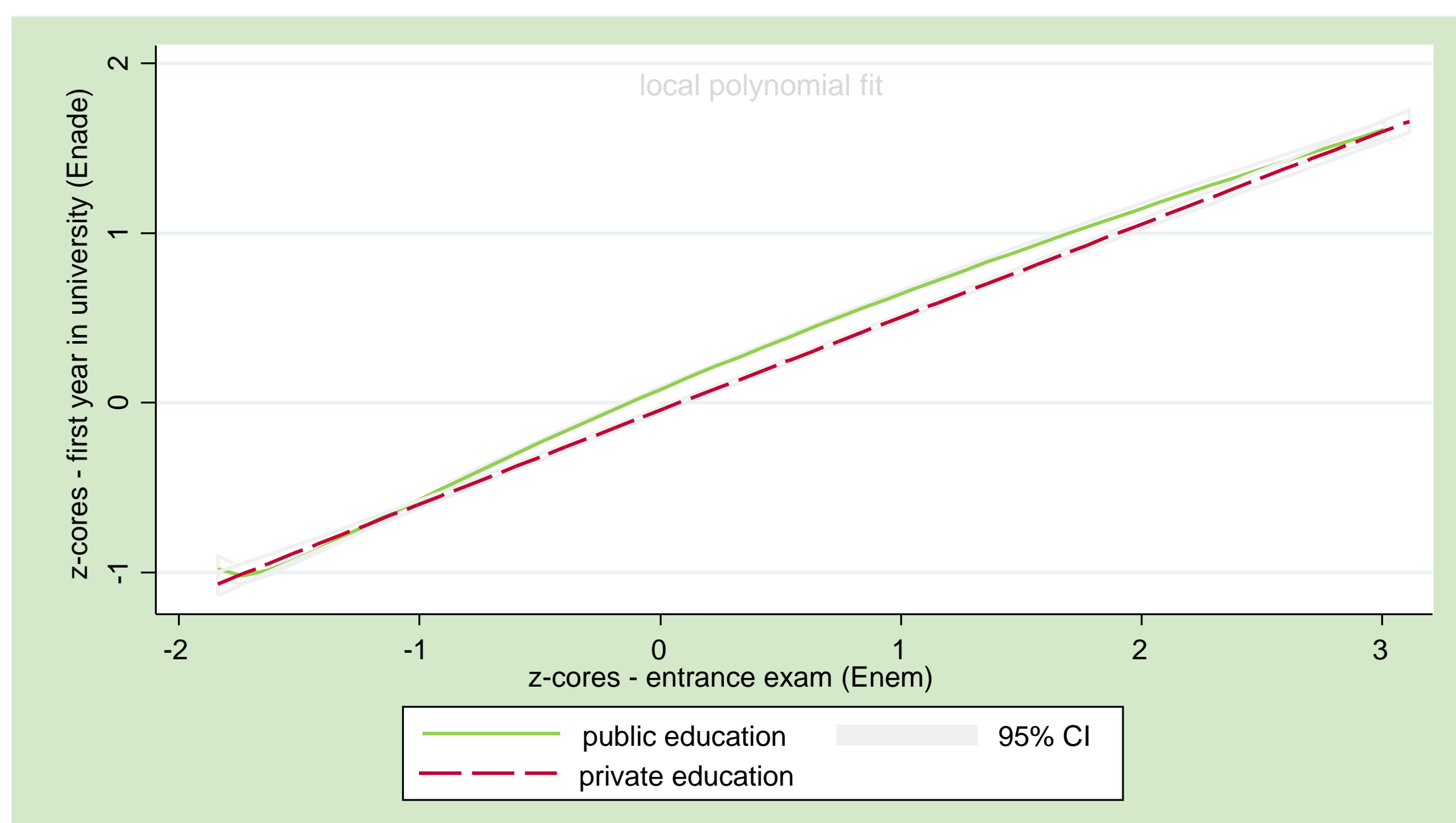
1. Research Topic

- This study investigates whether affirmative action **may** increase the quality of students admitted to universities in Brazil
- Our main question of interest is: **do entrance exams underestimate the academic potential of students eligible to affirmative action?**
- Two forms of affirmative action are analyzed: racial and social (based on schooling background)
- Data: Enem as a proxy for entrance exam (2005), and Enade as a proxy for academic achievement in university (2006)

2. Motivation

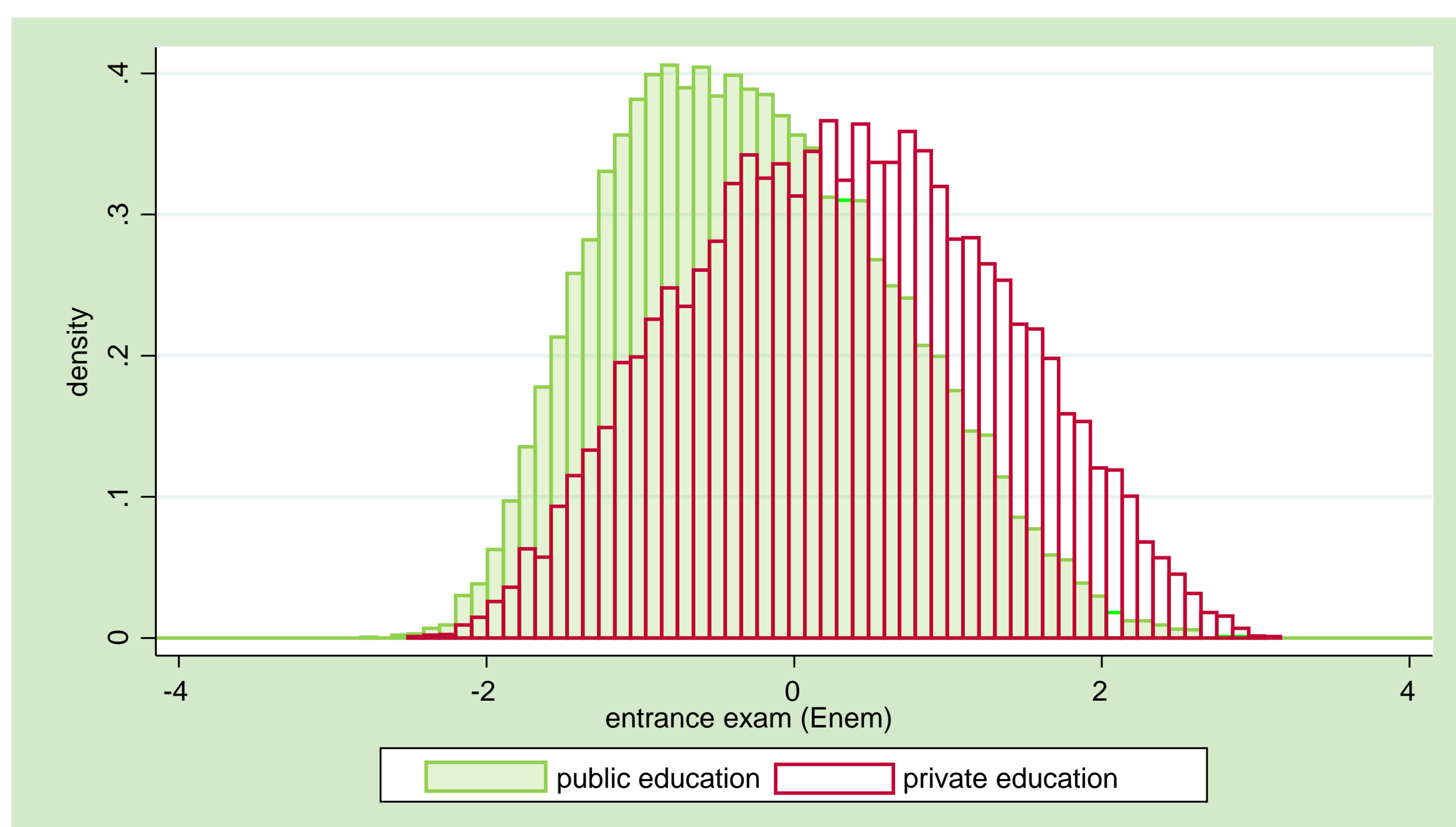
- The only criterion for admission into Brazilian universities is the candidate's achievement on the entrance exam
- But what if the group to which students belong (social/racial) also carries information about their expected academic achievement?
 - In this case, affirmative action may be used in order to increase the quality of admitted students

Achievement in University Conditional on Entrance Scores (Public x Private school students)



→ students coming from public schools tend to score higher in university than students from private schools with similar entry scores

Entrance Scores (Public x Private school students)



→ but students coming from public schools usually have lower entry scores

3. Empirical Strategy

Model 1 – Naive comparison (biased)

Compare achievement in university (Enade) between eligible and non-eligible (we argue that this is a biased comparison)

Model 2 – Nonparametric control for entry scores

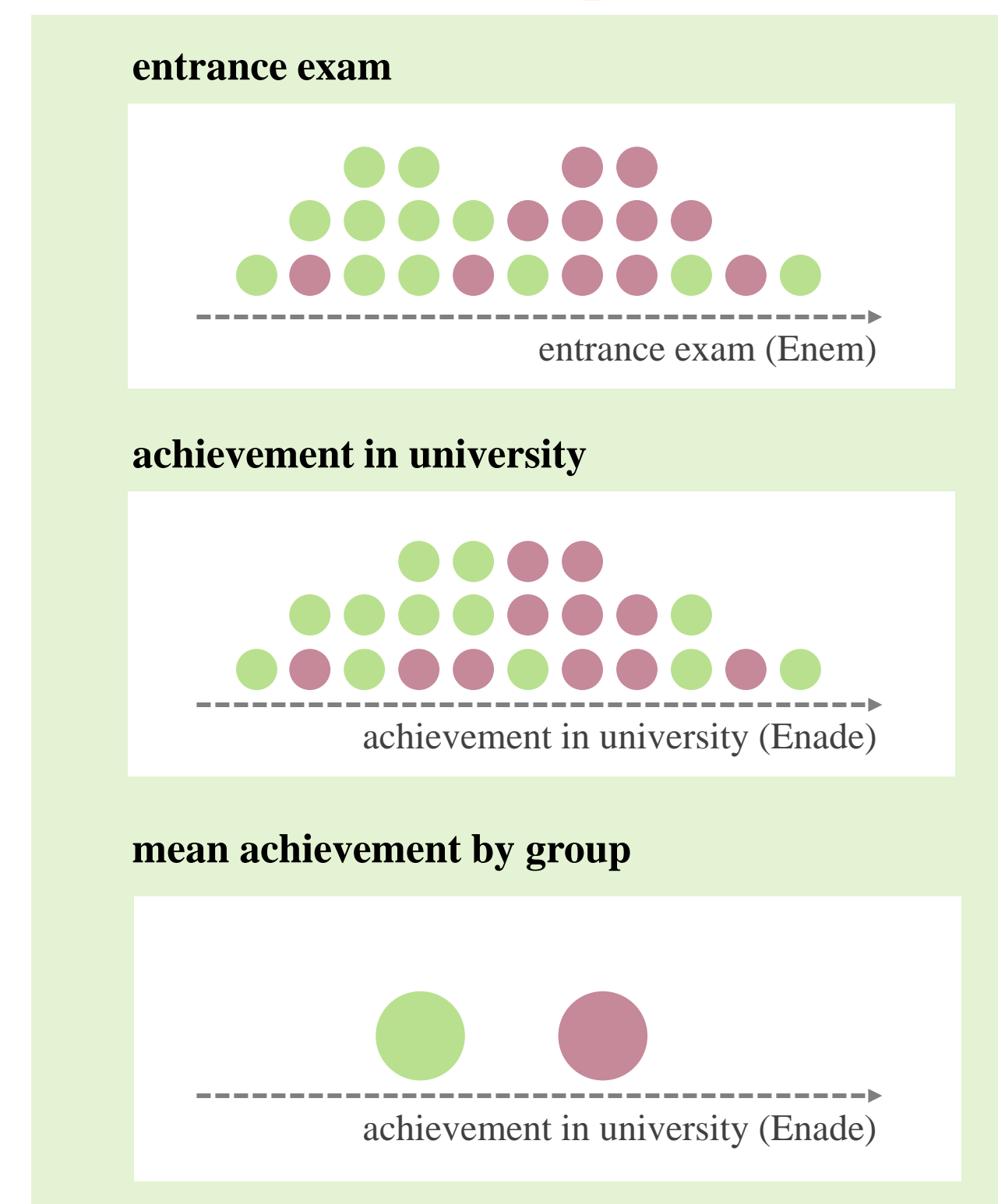
Compare university achievement (Enade) between eligible and non-eligible students who scored the same in entrance exam (Enem)

Model 3 – Linear control for entry scores

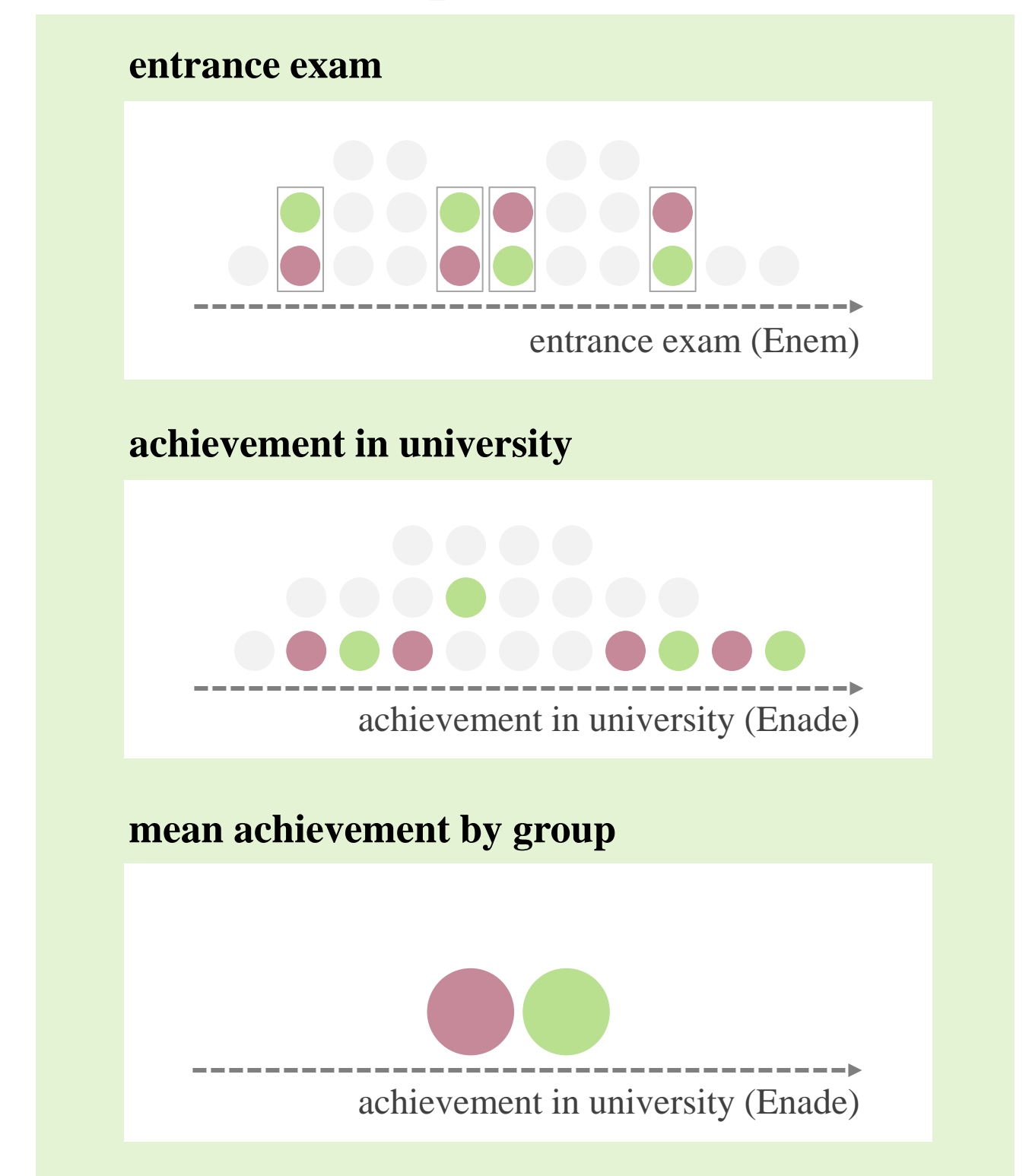
Same as Model 2, but imposing a linear relation between entrance exam scores and university scores (leads to increase in power)

Empirical Models

Model 1 (naive comparison - biased)



Model 2 (nonparametric control)



4. Results

Upper-Bound Estimates for the Effect of Affirmative Action on University Scores

	Model 1 (biased)	Model 2	Model 3
Social Affirmative Action			
<i>public_school_student</i>	-0.238*** (0.0161)	0.136** (0.0535)	0.114*** (0.0104)
Racial Affirmative Action			
<i>black_brown_student</i>	-0.0554*** (0.0135)	-0.0152 (0.0512)	0.0294*** (0.00993)

Note: Measured in standard deviations of Enade scores. All models use 37,422 observations.

5. Policy & Research Implications

- Affirmative action policies may increase academic achievement in Brazil, specially if based on schooling background
- Studies that fail to control for student entry scores may be biased (most likely against eligible groups)
- Quasi-experimental studies that find a negative impact of affirmative action on student quality should investigate for the possibility that a reparametrization of the policy would lead to a positive impact (e.g. reduction in the number of quotas)