How do beliefs shape the impacts of preferential admissions on student outcomes?

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Abstract:
We study the impacts of preferential admissions on disadvantaged students' pre-college outcomes, enrollments and persistence in college when students are misinformed about admission credentials. First, we elicit the subjective beliefs of over 6,000 high-school students in Chile and link them to longitudinal administrative data. We document that pre-college beliefs independently predict outcomes up to 18 months after our data collection, and that belief biases are widespread. Second, using the randomized expansion of the PACE percent plan in Chile, we show that the policy impacts on the admissions and enrollments of disadvantaged students are positive (around a third of control group rates), but 60 percent lower than what they would be under full take-up and without negative admission effects, indicating that pre-college choices contributed to policy impacts. Impacts on pre-college effort and achievement are negative (around -0.10 st. dev.), and consistent with a response to incentives under the belief biases we measured. To quantify the role of pre-college beliefs, we use our linked survey-administrative data and the variation induced by the randomized experiment to estimate a dynamic programming model of pre-college effort, achievement, entrance exam taking, admissions and enrollments that relaxes the assumption of rational expectations. Using simulations from the estimated model, we find that: i) belief distortions generate negative admission effects for 6 percent of the students who would be admitted without the policy, but lower their pre-college effort in the incorrect anticipation of a guaranteed admission, ii) subjective beliefs distort the allocation of talent to college compared to the rational expectations benchmark, inducing students with lower entrance exam scores to enroll in response to preferential admissions, iii) combining preferential admissions with pre-college belief corrections can simultaneously increase the enrollments of disadvantaged students and decrease their dropout rates. Preferential admissions can increase college participation from disadvantaged groups, but in the presence of belief distortions they can have unintended consequences on pre-college achievement and on the allocation of college seats.