

**Affirmative Action in Higher Education:  
a Structural Model of the College Decision-Making Process**

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This paper addresses how affirmative action in college admissions affects future earnings for underrepresented groups. In order to complete this task, I estimate a structural model of the college decision-making process. This includes decisions by individuals as to where to submit applications, which school to attend, and what field to study. It also includes decisions by schools as to which students to accept. By estimating the whole process, including the returns to attending a particular school in a particular major, it is possible to see how the decision-making behavior of underrepresented minorities would be affected by changing the college admission decisions. Forecasts of expected earnings of the underrepresented groups can then be made under different admission policies. Throughout, individuals have rational expectations and are maximizing the present value of lifetime utility, recognizing the dependence of future utility on choices made today.

The primary difficulty in estimating these decisions is the presence of unobserved ability. We would expect unobserved ability to affect all stages of the problem from the application decision to future earnings. I use mixture distributions to capture the unobserved ability. The key assumption is that there are a finite number of ‘types’ where the types can correspond to different levels of unobserved ability. These types are unobserved and affect the application decision, the admissions decision, the choice of college and major, and future earnings.

Implicit throughout the paper is the idea that there may be optimal college qualities for individuals of different ability levels. That is, the option to attend a very high quality school may be unattractive to an individual of low ability because of the effort the high quality school demands. This holds true for majors as well. Certain majors may require more effort, with the effort required dependent upon the quality of the school and the individual’s own ability. Hence, the optimal college quality for someone who is interested in engineering may be different from someone interested in sociology. Affirmative action, then, may change not only the quality of colleges attended by underrepresented groups, but the distribution of majors as well.