Estimating a Dynamic Structural Model of the Entrance Exam: Effects on Educational Investment and Welfare *

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Abstract

This paper proposes and estimates a dynamic discrete choice model of students' educational investment and application behavior in entrance exams. Unlike the school choice problem, which has been extensively investigated in the literature, changes in entrance exams affect not only the matching between students and schools but also students' educational investment and thus their preparedness for future entrance exams. The presented counterfactual analyses show that both increasing the cutoff scores and enhancing the availability of information on students' admission probability in the entrance exam would affect their ex-ante welfare but not change their educational investment. In particular, female students, low-SES students, and students with low initial scores are affected more than their counterparts. The results suggest that students tend to react to policy change in the entrance exam by changing their application behavior, not their study behavior.

Keywords: Entrance exam, school choice, dynamic discrete choice model, structural estimation.

JEL Classification: H75, I21, I28

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