

A Dynamic Framework of School Choice: Effects of Middle Schools on High School Choice*

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Abstract

This paper explores the dynamic relationship between school choices made at different educational stages and how it affects racial segregation across schools. We use New York City public school choice data to ask: “How does the middle school that a student attends affect her high school application and assignment?” We take two approaches to answer the question. First, we exploit quasi-random assignments to middle schools generated by the tie-breaking feature of the admissions system. We find causal evidence that students who attend high-achievement middle schools apply and are assigned to high-achievement high schools. Second, we develop and estimate a dynamic two-period model of school choice to decompose this effect and analyze the equilibrium consequences of counterfactual policies. In our setup, students applying to middle schools are aware that their choices may affect which high schools they eventually attend. Specifically, the middle schools that students attend can change how they rank high schools (the *application* channel) and how high schools rank their applications (the *priority* channel). We find that the *application* channel is quantitatively more important. Using the estimated model, we ask if an early affirmative action policy can address segregation in later stages. We find that a middle school-only affirmative action policy can alter students’ high school applications and thus their assignments, contributing to desegregating high schools. This finding suggests that policy interventions for desegregation should start early.

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