School Access and City Structure*

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Abstract

This paper quantifies the impacts of schools on the internal structure of cities. While their direct effect on the residential choices of households with kids is well-established, I explore the indirect consequences they bear for childless households and the geography of labor supply. Using data from Madrid, I first unveil extensive spatial sorting based on whether a household has children and link it to the need of parents to access both schools and workplaces. Then, I develop a general equilibrium quantitative urban model with households differentiated by parenthood and skills. This incorporates the school choice problem faced by parents, and allows for the geography of schools to affect housing and labor markets in equilibrium. The empirical estimation relies on a unique dataset covering the universe of applications to publicly funded schools, with which I estimate parents' preferences and quantify school access. To address the challenge of the feedback loop between neighborhood composition and school quality - due to the relevance of peer effects - I make use of instruments based on the historical expansion of the city. Counterfactual simulations reveal that schools constrain the residential choices of parents, and as a consequence induce an opposite reallocation by childless households. This key result mutes the effects of school frictions on housing and labor markets and the consequences for segregation.

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