

# School Access and City Structure\*

Giorgio Pietrabissa

*CEMFI*

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## Abstract

This paper quantifies the effects of schools on the economic 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 schools to affect both 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 endogeneity between neighborhood composition and school quality I exploit exogenous variation based on the historical expansion of the city. Counterfactual simulations reveal that, by constraining the residential choices of parents, schools induce an opposite reallocation by childless households, which halves the effects on the housing and labor market. The model further unveils substantial cross-market effects between the school and labor markets, which have significant implications for policies increasing school choice and to understand the consequences of teleworking.

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