

Housing Markets, Subsidies and the Economic Effects of Infrastructure Investments

A Dissertation
Presented to
The Academic Faculty

By

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This dissertation by Juan Pablo Uribe is accepted in its present form
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CURRICULUM VITAE

Juan Pablo Uribe was born and raised in Bogotá, Colombia. Prior to Brown, where started his Ph.D in 2015, he worked as a consultant investigating recent inequality trends in Latin America at the World Bank and the Inter-American Development Bank (IDB). He received a bachelor's in 2011 and master's degree in 2013 both from Universidad de Los Andes in Bogotá, Colombia.

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ABSTRACT

Underpinning my thesis is a desire to understand the effects of public investments in infrastructure and be able to do a welfare analysis of its economic impacts. The different chapters of this thesis investigate the behavioral and market responses to government programs designed to increase access to affordable housing, utilities, and the internet. Methodologically, all chapters consider the spatial component of these investments combining economic theory with new data sources and exogenous variation, coming principally from discontinuities. The first and second chapters explore how the housing market responds to two different subsidies. The first chapter shows the market response to a housing policy designed to promote homeownership for low-income households. I show compelling evidence of the market response to these subsidies, and I propose and estimate a model that rationalizes the observed equilibrium. Households reduce their housing consumption to qualify for the subsidy. I use the model and estimated parameters to evaluate the policy. I show that the subsidies may not be doing what it is supposed to do and that the policy's particularities matter. The second chapter shows how the housing market responds to a location-based targeting tool—the estratos—designed to target subsidies to poor neighbourhoods. A core insight of many urban economic models is that using location as a targeting tool may be ineffective because housing or labor markets respond to the subsidies. People want to move to subsidized areas affecting the labor and housing markets. This theory is hard to test as targeted areas are systematically different. I use the particularities of the assignment rule to test this urban economics insight and show that the housing market responds to the subsidies assigned to lower quality areas. Subsidized areas are getting more new construction, and these areas are more expensive than comparable neighbourhoods with lower subsidies. The final chapter studies how a government push to expand internet access affects educational outcomes and human capital formation. In this chapter, my coauthor and I, show that these types of interventions designed to close the digital gap can also reduce the education gap.