Essays on Urban and Labor Economics
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My dissertation, entitled “Essays in Urban and Labor Economics” explores the relationship between residential location choice of households and key social phenomena, including school quality, crime, and intergenerational mobility. These abstracts are provided as an overview of my current research.

1 School Quality, Crime, and Residential Sorting in an Equilibrium Framework (job market paper)

This paper demonstrates that localized improvements in school quality and crime are not always beneficial to the households that previously resided in that location, once equilibrium effects are taken into account. The equilibrium model of household residential location choice presented here takes into account the endogenous adjustments of neighborhood composition and housing prices, as well as school quality and crime. The model is estimated using a dataset from the American Community Survey and detailed data on local school quality and crime in the San Jose-San Francisco-Oakland combined statistical area for the years 2009-2013. The estimation procedure uses data on household and neighborhood characteristics and geographic variation to address the simultaneous causation between the key variables. Results show that the endogenous sorting process and adjustments to school quality and crime reinforce exogenous improvements in school quality and crime, amplifying the effect. The effects of these improvements on the households that reside in the affected location are highly varied and in many cases detrimental, particularly when the equilibrium effects are large. Lower income, less educated households are particularly likely to be adversely affected.

2 Effects of Residential Segregation on Crime and School Quality: Evidence from Quantile Effects (in progress)

This paper uses local identification restrictions to estimate the values of the structural derivatives of functions in an equilibrium model of school quality, crime, and residential location choice. The equilibrium model presented in this paper satisfies an additive separability condition that makes it possible to express all equations in triangular form. The model specification is very flexible, allowing the unobserved components to enter the equations in nonseparable ways. The flexibility allows the causal effects of endogenous variables to differ across neighborhoods that share the same exogenous characteristics. The model is estimated using a large dataset from the American Community Survey and detailed data on local school quality and crime in the San Jose-San Francisco-Oakland combined statistical area for the years 2009-2013. Preliminary results indicate that there is significant variation in the impact of residential segregation on local school quality across the different school quality quantiles.
Local Determinants of Intergenerational Mobility in the US (in progress)

Recent work has brought attention to the variation in intergenerational mobility across areas in the US. This paper estimates causal effects of local social and demographic variables on intergenerational mobility. The estimation process exploits geographic restrictions to create instruments that arise naturally from a model of residential sorting across areas. The effects are estimated using local identification methods that allow causal effects to differ across areas that have the same exogenous characteristics. The model is estimated using the publicly available data from Chetty, Hendren, Kline, and Saez (2014) on intergenerational mobility and merging it with the US Census data from 1990. Results include the effects of residential segregation, income inequality, school quality, and family stability on intergenerational mobility.