

報告者：清水良樹（ミネソタ大学）

Title:

Crime Measures and Housing Prices: An Analysis Using Quantile Regression and Spatial Autocorrelation

Abstract

Crime is a disamenity, so buyers should be willing to pay more for a house (all else equal) in a low crime area, suggesting that high crime rates depress housing prices. Conversely, it is plausible that criminals prefer wealthier areas because of the higher expected returns from their transgressions. This study examines the link between measures of crime and prices of residential housing. Our data begin in 2008 and end in 2020 for Seattle, Washington, including all reported felonies (756,304); 911 calls (1,528,303); all recorded residential real estate transactions (78,989), as well as the corresponding property characteristics; demographic data and the associated changes. The inherent endogeneity between crime rates and housing prices forces us to find an instrument for crime rates. After rejecting several plausible choices, based on the Wu-Hausman test, the key variable in our empirical analysis is the number of 911 calls in a given beat. We show a significant negative impact of crime on housing prices. A 1% increase in crime (instrumented by the number of 911 calls) leads to approximately a 1.74% (1.30%) decrease in house prices without (with) adjustment for spatial autocorrelation. We also investigate the link between prices and crime hotspots. In our hedonic models we show that distance to a crime hotspot is negatively related to housing prices, which suggests that criminals choose to operate in wealthier areas. Furthermore, from our quantile regression estimates, we find that the impact of crime is stronger for lower priced housing.