Abstract

Crime across the world hinders community development and economic growth. Criminal market structure is likely a key determinant. I study the impact of criminal market structure on homicides and school dropout in Mexico between 2006 and 2018. I measure criminal market structure with the number of active Mexican Drug Trafficking Organizations (DTOs) in Mexican municipalities. For identification, I develop a novel selection model using distance-based instrumental variables to estimate the causal effects. The instruments are based on DTOs’ distance to their existing base of operations. My framework delivers interpretable treatment effects for each possible number of active DTOs, while conventional two-stage least squares estimators do not. Although my focus is on criminal market structure, the same framework can be used to examine other licit industries as well. I find more DTOs lead to more homicides, with the relationship being increasing and S-Shaped in the number of DTOs, while school dropout also increases, but with a linear relationship. Furthermore the effects on dropout are driven by older, male students, which suggests DTOs are pulling students into criminal activities. This is the first paper to study the non-linear effects of criminal market structure on both crime and education in an instrumental variables framework.