

Does Incarceration Increase Crime?

Abstract

This paper studies the causal effect of incarceration on reoffending using discontinuities in state sentencing guidelines and two decades of administrative records from North Carolina. A regression discontinuity analysis shows that one year of incarceration reduces the likelihood of committing new assault, property, and drug offenses within three years of conviction by 38%, 24%, and 20%, respectively. Incarceration sentences temporarily incapacitate offenders by removing them from society but can also influence post-release criminal behavior. To parse the non-linear and heterogeneous effects of these channels, we develop an econometric model of sentencing length and recidivism. Our model allows for Roy-style selection into sentencing on the basis of latent criminality. We propose a two-step control function estimator of the model parameters and show that our estimates accurately reproduce the reduced form effects of the sentencing discontinuities we study. Our parameter estimates indicate that incarceration has modest crime-reducing behavioral effects that are diminishing in incarceration length. A cost-benefit analysis suggests, however, that the benefit of reducing crime by lengthening sentences (through both incapacitation and behavioral channels) is outweighed by the large fiscal costs of incarceration.