Measuring Effects of Conviction and Incarceration on Recidivism using Multi-Treatment Random Judge Designs

Aurelie Ouss, University of Pennsylvania

Abstract

This paper examines the effects of conviction without incarceration – a common outcome of criminal court proceedings – and of incarceration on recidivism. We study felony cases in Virginia that are quasi-randomly assigned to judges, and make three contributions. First, we present estimates of the impact of conviction on recidivism based on a 2SLS regression with judge stringency instruments. If given a causal interpretation, our estimates would imply large and sustained increases in recidivism from receiving a conviction relative to dismissal. Using a similar research design, we find that incarceration reduces recidivism in the first year, likely due to incapacitation, with no longer-term effects.

These conclusions about incarceration are further supported by analysis based on discontinuities in sentencing guidelines. Second, we discuss how, in multiple-treatment settings, some models of judge decision making facilitate the interpretation of 2SLS estimates as well-defined treatment effects, while others do not. In particular, we consider which models of the judge decision process imply that 2SLS estimates interpretable treatment effects for a particular margin, such as conviction vs dismissal, or incarceration vs conviction.

Third, we discuss and implement several methods which allow us to recover margin-specific treatment effects under sets of assumptions where 2SLS estimates do not. Most of these yield conclusions similar in sign and magnitude to those drawn based on the 2SLS estimates, although they are sometimes less precise. We conclude that conviction may be an important and potentially overlooked driver of recidivism, while incarceration mainly has shorter-term incapacitation effects.