

"Testing Exclusion and Shape Restrictions in Potential Outcomes Models" (with Kirill Ponomarev)

Abstract

Exclusion and shape restrictions are crucial for defining causal effects, understanding individual heterogeneity, and interpreting estimators in potential outcome models. This paper is concerned with characterizing the empirical content of such restrictions. To date, the testable implications of these restrictions have been studied on a case-by-case basis within a limited set of models. Using a novel graph-based representation of the model, we provide a systematic approach to deriving sharp testable implications of general support restrictions. We illustrate the proposed approach in simulations and an empirical application.