Orville D. Mondal

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Education

Ph.D., Economics, Pennsylvania State University — 2017-2023 (expected)
M.A. Economics, Delhi School of Economics, University of Delhi — 2013-2015
B.A. Economics, University of Delhi — 2010-2013

Research

Bounding Treatment Effects in Experiments with Non-Compliance: The Role of Follow up Surveys

Abstract: In this paper I study the problem of identifying the causal effect of an experimental treatment when the experiment suffers from non-compliance. In particular, I consider the identifying power of information collected from non-complying participants after the completion of the treatment phase. Follow up surveys often ask study praticipants why they chose not to accept an offer of treatment despite being assigned to it, and answers to such questions offer insights into the decision process by which agents choose to comply with their assigned treatment status. I propose a model which rationalizes an agent's compliance decision and use it to define a set of values for the average treatment effect which are conformable with data observed in a randomized trial. This model and the implied set of identified values for the average treatment effect rely crucially on the availability of follow up surveys which ask agents why they chose to not comply. This underscores the importance of following up with non-complying agents since the model often leads to substantially tighter identified sets for the average treatment effect than what is possible without this information. I apply the proposed model to data from the Job Training Partnership Act Study to estimate identifed sets for the average treatment effect for a number of employment outcomes.

Identification of Binary Choice Models with Misreported Outcomes (with Rui Wang)

Abstract: This paper characterizes partial identification of a binary choice model when the binary dependent variable is potentially misreported. Two different approaches are proposed which exploit different instrumental variables, respectively. In the first approach, the instrument is assumed to only affect the true dependent variable but not the misreporting probabilities. The second approach uses an instrument that only affects misreporting probabilities monotonically but does not influence the true dependent variable. These approaches neither impose distributional assumptions over unobserved disturbances nor assume parametric models for the misreporting process. The proposed approaches are used to study educational attainment using National Longitudinal Surveys from 1976.

Work in Progress

Structural Priors (with Michael Gechter and Keisuke Hirano)

Teaching Experience

Graduate Teaching Assistant for undergraduate courses in microeconomics (Fall 2017-Fall 2018).
Graduate Teaching Assistant for PhD (Spring 2019) and Masters (Fall 2019, Spring 2020, Fall 2020, Fall 2021, Spring 2022) courses in econometrics.

Work Experience

Risk Analyst, Credit Risk Oversight, American Express India Pvt. Ltd — June 2015 - May 2016
Research Assistant, Delhi School of Economics — June 2016 - June 2017

Languages and Skills

Computer: Julia, Matlab, Stata, R.
Languages: Bengali (native), English (fluent), Hindi (conversational)

References

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