Daniel Ober-Reynolds

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EDUCATION

Ph.D. in Economics, University of California – Los Angeles <u>Advisor</u> : Andres Santos	(Expected) June 2024
M.A. in Economics, University of California – Los Angeles	June 2020
B.S. Summa Cum Laude, Arizona State University <u>Majors:</u> B.S. Economics, B.A. Mathematics, B.A. Philosophy	May 2016

RESEARCH

Job Market Paper

• "Estimating Functionals of the Joint Distribution of Potential Outcomes with Optimal Transport"

Abstract: Many causal parameters depend on a moment of the joint distribution of potential outcomes. Such parameters are especially relevant in policy evaluation settings, where noncompliance is common and accommodated through the model of Imbens & Angrist (1994). This paper shows that the sharp identified set for these parameters is an interval with endpoints characterized by the value of optimal transport problems. Sample analogue estimators are proposed based on the dual problem of optimal transport. These estimators are \sqrt{n} -consistent and converge in distribution under mild assumptions. Inference procedures based on the bootstrap are straightforward and computationally convenient. The ideas and estimators are demonstrated in an application revisiting the National Supported Work Demonstration job training program. I find suggestive evidence that workers who would see below average earnings without treatment tend to see above average benefits from treatment.

WORKING PAPERS

• "Robustness to Missing Data: Breakdown Point Analysis"

Abstract: Missing data is pervasive in econometric applications, and rarely is it plausible that the data are missing (completely) at random. This paper proposes a methodology for studying the robustness of results drawn from incomplete datasets. Selection is measured as the squared Hellinger divergence between the distributions of complete and incomplete observations, which has a natural interpretation. The *breakdown point* is defined as the minimal amount of selection needed to overturn a given result. Reporting point estimates and lower confidence intervals of the breakdown point is a simple, concise way to communicate a result's robustness. An estimator of the breakdown point of results drawn from GMM models is proposed and shown \sqrt{n} -consistent and asymptotically normal under mild assumptions. Lower confidence intervals of the breakdown point are constructed with a simple bootstrap procedure. The paper concludes with a simulation study illustrating good finite sample performance.

WORK IN PROGRESS

- "Conditional Mean Inference Under Positivity Constraint"
- "Nonparametric Polychotomous Choice Sample Selection"

Relevant Experience

Amazon, Economist Intern	June 2022 to September 2022 June 2021 to September 2021
UCLA, Research Assistant	May 2019 to March 2020
Federal Reserve Bank of Richmond, Research Associate	June 2016 to August 2018
TEACHING	
Teaching Assistant (UCLA)	
Graduate Courses Econometrics II (ECON 203B)	Winter 2023
Undergraduate Courses Introduction to Econometrics (ECON 103) Probability and Statistics for Economists (ECON 41) Microeconomic Theory (ECON 101)	Fall 2020, Winter 2021, Fall 2022 Spring 2021, Spring 2023 Spring 2020
Honors and Awards	
UCLA Dissertation Year Fellowship (DYF) Graduate Research Mentorship (GRM) Fellowship NSF GRFP Honorable Mention University Fellowship	2023-2024 2021-2022 2020 2018-2019
ASU CLAS Dean's Medalist (Economics) JP Morgan Chase Scholar Barrett, the Honors College	Spring 2016 2014
Other	
Seminars and Conferences Econometric Society North American Summer Meeting (NA UCLA Econometrics Proseminar	ASM) 2023 2020 to 2023
Software Python, MATLAB, R, Stata, LAT _E X	
This CV was last updated 7 November, 2023	