Thomas Carr

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EDUCATION

University of Bristol 2026 - present
PhD Economics
London School of Economics 2010 - 2011
MRes Economics *Distinction*
London School of Economics 2009 - 2010
MSc Economics *Distinction*
University of Durham 2004 - 2007
BA(Hons) Economics *First*

RESEARCH FIELDS

Econometric Theory, Causal Inference, Machine Learning

JOB MARKET PAPER

Estimating Local Average Treatment Effects Under Weak Monotonicity

Adstract: I study the estimation of average treatment effects in the presence of compliers and defiers who occupy distinct covariate strata. I consider the reordered IV estimator suggested by Sloczynski (2026), which reorders the instrument for covariate values where defiers are present. I characterise the asymptotic properties of a feasible reordered IV estimator where propensity score estimates are used to identify defier covariate strata. I show conditions under which the feasible estimator is asymptotically equivalent to an oracle estimator with knowledge of defier covariate strata. I propose estimating the propensity score using flexible semiparametric methods, and show that the resulting estimator can achieve oracle equivalence. I study the finite sample properties of this estimator in a simulation exercise, and apply it to the data of Card (1993).

WORK IN PROGRESS

- Instrumental Variables Without Overlap
- Testing Instrument Validity with Covariates (*with Toru Kitagawa*) [Arxiv]
- The Kitagawa (2015) Test for Instrument Validity: Implementation and Extensions (*with Toru Kitagawa*)
- Bayesian Reinforcement Learning for Partially-Observable Markov Decision Processes (*with Kohei Kawaguchi and Toru Kitagawa*)

PRESENTATIONS

IAAE Annual Conference (2022), Siena Workshop on Econometric Theory and Applications (2023), Symposium on Econometric Theory and Applications (2026)

REFERENCES

Sami Stouli	**Weining Wang**	**Toru Kitagawa**
University of Bristol	University of Bristol	Brown University
s.stouli@bristol.ac.uk	weining.wang@bristol.ac.uk	t.kitagawa@brown.edu

TEACHING EXPERIENCE

University of Bristol

MSc Machine Learning for Economics 2026 - 2027
BSc Applied Quantitative Research Methods 2026 - 2027
BSc Probability and Statistics 2026

London School of Economics

BSc Intermediate Macroeconomics 2011 - 2015
Course manager in 2014 - 2015, class teacher prizes in 2012, 2013 and 2014
Summer School Intermediate Macroeconomics 2014
Summer School Introductory Macroeconomics 2013

RESEARCH EXPERIENCE

Brown University 2022 - 2023
Research Associate
University College London 2018 - 2021
Research Assistant
London School of Economics 2011 - 2016
PhD Economics (incomplete)

SKILLS

Computer Languages MATLAB, R, Stata, Python, VBA
Languages English, Japanese (JLPT N1)