EVAN FRIEDMAN

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Department of Economics
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EDUCATION

Ph.D. Candidate in Economics, Columbia University   Expected 2020
Sc.B. in Applied Mathematics-Economics, Brown University   May 2012

FIELDS OF SPECIALIZATION

Microtheory, Behavioral and Experimental Economics

JOB MARKET PAPERS

JMP #1 "Stochastic Choice and Noisy Beliefs in Games" with Jeremy Ward

We study an equilibrium model in which players make stochastic choices given their beliefs and there is noise in the beliefs themselves. The model primitives are an action-map, which determines a distribution of actions given beliefs, and a belief-map, which determines a distribution of beliefs given opponents' behavior. These are restricted to satisfy axioms that are stochastic generalizations of "best response" and "correct beliefs", respectively. In our laboratory experiment, we collect actions data and elicit beliefs for a family of asymmetric 2-player games with systematically varied payoffs, allowing us to "trace out" both of these mappings. We find that, while both "noise in actions" and "noise in beliefs" are important in explaining observed behaviors, there are systematic violations of the axioms. In particular, although all subjects observe and play the same games, subjects in different roles have qualitatively different belief biases. The data (actions and beliefs jointly) are well described by a modified version of cognitive hierarchy plus risk aversion. Structural estimates suggest that the player role itself induces a higher degree of strategic sophistication in the player with more asymmetric payoffs.

JMP #2 "Stochastic Equilibria: Noise in Actions or Beliefs?"

Revise and resubmit, American Economic Journal: Microeconomics

Much is known about the empirical content of quantal response equilibrium (QRE) which relaxes the rationality requirement of Nash equilibrium by allowing for "noise in actions" while maintaining that beliefs are correct. By contrast, little is understood of the testable restrictions of equilibrium models which allow for "noise in beliefs" while maintaining best response. We introduce noisy belief equilibrium (NBE) for normal form games in which axioms restrict belief distributions to be unbiased with respect to and responsive to changes in the opponents' behavior. The axioms impose testable restrictions both within and across games, and we compare these restrictions to those of regular QRE (Goeree et al. 2005) in which axioms are placed on the quantal response function as the primitive. We show that NBE generates similar predictions as QRE such as the "own payoff effect", and yet is more consistent with the empirically documented effects of changes in payoff magnitude.

WORKING PAPERS

"Endogenous Quantal Response Equilibrium"

> *Revise and resubmit,* <u>Games and Economic Behavior</u>

"Range Effects in Multi-Attribute Choice: an Experiment" with Tommaso Bondi and Dániel Csaba

WORKS IN PROGRESS

"Incomplete Preferences and Preference for Flexibility" with Marina Agranov, Mark Dean, Han Huynh, and Pietro Ortoleva

"Mediating Conflict in the Lab" with Alessandra Casella, Massimo Morelli, and Manuel Perez Archila

"Learning to Ignore Non-Rationalizable Actions" with Dilip Ravindran and Jeremy Ward

PRIOR TO GRADUATE STUDIES

"The Cost of Capital of the Financial Sector" with Tobias Adrian and Tyler Muir

AWARDS, FELLOWSHIPS, AND GRANTS

Dissertation fellowship, Department of Economics, Columbia University	2019 – 2020
CELSS Dissertation Grant	2018
CELSS Research Grant	2018
Wueller Teaching Award, Best TA for an undergraduate elective	2017
NSF Doctoral Dissertation Research Improvement Grant, SES-1730399	2017
Vickrey Prize for Best 3rd year paper	2017
Harriss Prize for Best 2nd year paper (runner-up)	2016
CELSS Research Grant	2016
Dean's fellowship, Columbia University	2014 – 2019
Samuel Lamport Prize for Best Economics Thesis (Brown)	2012
Award for Best Paper, 11th Annual Carroll Round	2012

RESEARCH ASSISTANTSHIP

Alessandra Casella and Massimo Morelli	Spring 2018
Mark Dean	Summer 2018
David Weil (Brown)	l2011 – 2012

WORK EXPERIENCE

Research Analyst, Federal Reserve Bank of New York	l2012 – 2014
RA for Tobias Adrian and Ernst Schaumburg	

TEACHING ASSISTANTSHIP

Principles of Economics, Prajit Dutta	Fall 2018
The American Economy, Claudia Halbac	Fall 2017
Behavioral Economics, Mark Dean	Spring 2017
Economics of Uncertainty and Information, Pierre-André Chiappori	Fall 2016

Intermediate Microeconomics, Mark Dean	Spring 2016
Intermediate Macroeconomics, Irasema Alonso	Fall 2015
Intermediate Finance, George Borts (Brown)	Spring 2011, 2012

INVITED PRESENTATIONS

NYU Student Micro Lunch, Student Workshop in Experimental Economics Techniques*	2019
PSE Summer School Bounded Rationality Workshop, Student Workshop in Experimental Economic Techniques	2018
Stony Brook Game Theory, Summer School of the Econometric Society, NYU Student Micro Lunch	2017
Stony Brook Game Theory, Columbia-NYU-Wharton Graduate Students Conference in Experimental Economics, EconCon	2016
EconCon	2015
11th Annual Carroll Round Conference	2012

PERSONAL

Citizenship: USA
Languages: English (Native), French (Basic)

REFERENCES

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