ABDOLLAH FARHOODI

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EDUCATION

University of Illinois at Urbana-Champaign *2014— May 2020 (Expected)*
Ph.D. Economics
Committee: Dan Bernhardt (Chair), David Albouy, Jorge Lemus,
George Deltas, Guillermo Marshall

Sharif University of Technology, Iran *2012*
M.Sc. Economics
University of Tehran, Iran *2009*
B.Sc. Electrical Engineering (Control)

RESEARCH INTERESTS

Urban Economics, Industrial Organizations, Welfare Economics, Causal Machine Learning

WORKING PAPERS

Welfare Estimation in Peer-to-Peer Markets with Heterogeneous Agents: The Case of Airbnb (Job Market Paper)
Adviser: Dan Bernhardt

Introducing a Micro-Founded Index of Consumption Welfare: A Big Data Approach

Evaluating Regulations in Peer-to-Peer Markets: A Synthetic Control Approach to Study Santa Monica Ban on Aribnb (with Peter Christensen)

RELEVANT EXPERIENCE

International Monetary Fund

- Fund Internship Program *Summer–2018*

University of Illinois

- Research Assistant to Dan Bernhardt, Yufeng Wu, and Jorge Lemus *2015–2018*
- Big-Data in Environmental Economics and Policy Research Group *2018–current*

TEACHING EXPERIENCE

Instructor: University of Illinois
Applied Machine Learning in Economics *Spring 2019 – current*
Outstanding rating (top 10 percent) in the "List of Teachers Ranked as Excellent by their Students"

Teacher Assistant: (Undergraduate-Level) University of Illinois
Introduction to Microeconomics 2016–2018
Intermediate Microeconomics 2014–2015

Teacher Assistant: (Graduate-Level) Sharif University of Technology, Iran
Game Theory 2012
Econometrics I 2010, 2011
Microeconomics II 2010

SOFTWARE AND COMPUTER SKILLS

R, Python, MATLAB, STATA, SQL, Mathematica, HTML, GitHub, Microsoft Office, Excel, LaTeX

FELLOWSHIP AND AWARDS

Robert Willis Harbeson Memorial Dissertation Award May 2019
University of Illinois Summer Research Fellowship Summer 2018
University of Illinois Summer Research Fellowship Summer 2015
University of Illinois Economics Department Fellowship Fall, Spring 2014
Awarded in the "List of Teachers Ranked as Excellent by their Students" 2016–2019 (6 Semesters)
University of Illinois Graduate Teaching Certificate May 2019

REFERENCES

Dan Bernhardt (Chair)
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ABSTRACTS

Welfare Estimation in Peer-to-Peer Markets with Heterogeneous Agents: the Case of Airbnb (Job Market Paper)
Adviser: Dan Bernhardt

Peer-to-peer (P2P) markets allow small suppliers with limited capital to enter the markets that were traditionally occupied by large firms. This feature provides a potential decentralized distribution of opportunities. To investigate the distribution of welfare and opportunities among agents, I study the Airbnb short-term rental market as a successful P2P marketplace. Airbnb market is highly dynamic, decentralized, and contains heterogeneous agents with limited capacities. These features present challenges for classic aggregated methods to estimate supply and demand for welfare analysis. I use a daily panel of Airbnb rentals in Chicago between August 2014 to April 2017, and apply an individual-level multinomial logit model to estimate the distribution of consumer and producer surplus among differentiated agents. I show that properties in less advantaged neighborhoods benefit the least from access to the Airbnb market; even though these properties feature lower competitive pressure and lower opportunity cost of renting. My results show a disproportionate concentration of welfare in neighborhoods with higher income, house price, and in upper-class areas. **Introducing a Micro-Founded Index of Consumption Welfare: A Big Data Approach**

In this paper, I explore the heterogeneity in welfare from consumption based on a novel micro-founded index of welfare. I use Albania's 2012 Living Standard Measurement Survey to estimate the index in two steps. In the first step, I apply machine learning to find a non-parametric relation between households' consumption, and a large set of living conditions and characteristics indicators. In the second step, using the first step estimations, I find the distribution of households' marginal willingness to pay for each living condition's indicator, and estimate an index of welfare based on Bajari and Benkard (2005). I show that the index is highly correlated with households' consumption expenditures, but unlike consumption as a naive measure of welfare, it accounts for the existing heterogeneity among their living conditions and preferences. Finally, this paper studies the geographical, cross gender and age distributions of the welfare index and compares the estimations with the consumption expenditure as a naive measure of welfare.

Evaluating Regulations in Peer-to-Peer Markets: A Synthetic Control Approach to Study Santa Monica Ban on Aribnb (with Peter Christensen)

Together with Peter Christensen, I focus on the effect of a ban on Airbnb in Santa Monica as a natural experiment. I apply "elastic net synthetic control" as a recently developed causal machine learning method. Synthetic control method provides a framework to generate a treatment group for each potential outcome using a pool of control groups, and study multiple outcomes in the market. I study the effect of the ban that targets entire-home, Airbnb rentals on incumbent listings' revenue, pricing behavior, and local competition in the market. I show that the ban significantly dropped the number of entry and increases the market power of those who remained in the market. Studying welfare effect of the ban is the next step in this paper.