Junyi Hou

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EDUCATION

University of California, Berkeley, Ph.D. Economics   2015/08-2021/05 (expected)
- Dissertation: Essays in Development Economics and Political Economy
- References: Prof. Gérard Roland (chair); Prof. Andrés Rodríguez-Clare; Prof. Yuriy Gorodnichenko
- Ning Fellowship, 2015-2017, Doctoral Completion Fellowship, 2020

London School of Economics, MSc. Econometrics and Mathematical Economics   2013/09-2014/06
- Graduate with distinction, Ely Devons Prize (top of the class)

Nankai University, Bachelor in Economics (*with minor in Applied Mathematics*)   2009/09-2013/06
- Finalist for Best Undergraduate Thesis, 2013, First-Class Outstanding Student Scholarship, 2011; 2012

SKILLS & TOOLS

Causal Inference, Structural Estimation, Experiment Design; Python, SQL, Linux, Bash, Git, STATA, LaTeX, elisp

EXPERIENCE

Uber, Inc., Data Scientist II (part-time); Data Scientist Intern   2019/5-2020/5
Business Economics Team (manager: Dan Knoepfle)

Understanding drivers' responses to promotion programs
- Modeled drivers' selections and subsequent labor supply based on earnings and promotion schedules, estimated drivers' earning distribution non-parametrically, predicted drivers' participation and labor supply consistently
- Informed cost-benefit analyses of the largest driver promotion product in over 100 cities in the U.S. Addressed concerns in low participation and completion rates in the promotion product.

Estimating drivers' labor supply under non-linear compensation scheme
- Developed a structural model to predict labor supply of drivers facing non-linear compensation schedules, explained observed empirical pattern with estimated driver reservation wage
- Presented in policy economics group and cross-function teams

Evaluating the driver promotion program at the individual level
- Recovered distribution of treatment effect by exploiting variations in the same driver's exposures to both control and treatment arms in repeated A/B tests

ACADEMIC WORKS

Resource misallocation in the R&D Sector, Evidence from China   Job Market Paper
- First paper to structurally estimate the welfare loss from political connections distorting firms' R&D decisions
- Showed, through an endogenous growth model, heterogeneous factor market access creates a wedge in return to innovation and potentially resource misallocation in the R&D sector
- Estimated the model via a simulated method of moment estimator on large scale Chinese firm-level dataset
- Found the productivity growth in China is 1.2 percentage points lower (3.8% instead of 5.0%) due to the market privilege of inefficient but politically connected firms, which leads to 23% lower welfare.

Political Connection, Financial Frictions, and Allocative Efficiency   Work in Progress
- Studied how financial frictions affects allocative efficiencies across manufacturing firms in China
- Identified a specific source of resource misallocation, namely the political connectedness of firms. Showed politically connected firms have better access to bank credits despite lower profitability and more defaults before the reform
- Showed the 2004 Chinese banking reform improved allocative efficiency over 20% using a *diff-in-diff* design, and that this improvement is mostly due to expansions of politically unconnected firms gaining access to credit after the reform

UC Berkeley; Standford University; Centre for Economic Performance   2014; 2015; 2016-2017
Research Assistant to Prof. Peter Lorentzen, Prof. Dave Donaldson, Prof. Silvana Tenreyro
- Replicated empirical studies (Romer and Romer 2004; Uhlig 2005a, 2008); cleaned and managed large data sets (CEX, CEPII Trade); wrote numerical GE solvers (Allen, Arkolakis and Takahashi 2014)

IMMIGRATION STATUS

Citizenship: China, Visa Status: F1, U.S. permanent residency expected in March 2021.