

UNIVERSITY OF
ROCHESTER
Economics



Job Market
Candidates
2020-2021

University of Rochester - Department of Economics
2020-2021 Job Market Candidates

NAME	Job Market Paper	FIELDS	REFERENCES
Jihwan Do	<i>Cheating and Compensation in Price-Fixing Cartels</i> <i>Opportunism in Vertical Contracting: A Dynamic Perspective</i>	• Economic Theory • Game Theory • Industrial Organization	Paulo Barelli* Srihari Govindan Jeanin Miklos-Thal Yu Awaya
Min Fang	<i>Lumpy Investment, Uncertainty, and Monetary Policy</i>	• Macroeconomics • Monetary Economics • Financial Economics • Urban Economics	Yan Bai* Narayana Kocherlakota* Mark Bills Ronni Pavan
Victor Hernandez Martinez	<i>Who are the Liquidity Constrained among Employed Workers? Answers from Conditional vs Unconditional Income Transfers</i>	• Labor Economics • Applied Microeconomics • Unemployment & Displacement • Policy Evaluation • Inequality	Lisa Kahn* Ronni Pavan* Elaine Hill
Zibin Huang	<i>Peer Effects, Parental Migration and Children's Human Capital: A Spatial Equilibrium Analysis in China</i>	• Applied Economics • Labor Economics • Urban Economics	Ronni Pavan* Lisa Kahn* Nese Yildiz Junsen Zhang
Chen Kan	<i>Flattening of the Phillips Curve: Causes and Their Policy Implications</i>	• Monetary Policy • Macroeconomics	Narayana Kocherlakota* Yan Bai Gaston Chaumont
Armen Khederlarian	<i>Inventories, Input Costs and Productivity Gains from Trade Liberalizations</i>	• International Trade • Development & Macroeconomics	George Alessandria* Yan Bai Mark Bills Michael Wolkoff

*Advisor

University of Rochester - Department of Economics
2020-2021 Job Market Candidates

Alexis Orellana	<i>Teacher Assessment Biases and Achievement Gaps in High School</i>	• Applied Microeconomics • Economics of Education • Labor Economics	Ronni Pavan* Kegon Tan Lisa Kahn John Singleton
Yuki Tamura	<i>The Crawler: Three Equivalence Results for Object (Re)allocation Problems when Preferences Are Single-peaked</i>	• Market Design • Microeconomic Theory • Political Economy • Social Choice	William Thomson* Paulo Barelli Srihari Govindan Steven Landsburg

*Advisor

Jihwan Do

Department of Economics
University of Rochester
Harkness Hall
Rochester, NY 14627, USA

Phone: +1 (585)-512-5868
E-mail: econ.jihwando@gmail.com
Website: <https://sites.google.com/view/jihwan-do/home>
Citizenship: Republic of Korea

Education

Ph.D. in Economics, University of Rochester, USA, 2021 (expected)
M.A in Economics, University of Rochester, USA, 2018.
M.A in Economics, Sogang University, South Korea, 2015.
B.A. in Economics, Sogang University, South Korea, 2013.

Research Fields

Game Theory, Industrial Organization, Contract Theory.

Working Papers

- “Cheating and compensation in price-fixing cartels,” 2019, R&R at *Journal of Economic Theory*
- “Opportunism in Vertical Contracting: A Dynamic Perspective,” 2019 (joint with Jeanine Miklós-Thal)
- “Communication in Hub-and-Spoke Cartels,” 2019
- “Incentives under equal-pay constraint and subjective peer evaluation,” 2019 (joint with Yu Awaya)
- “Joint market dominance through exclusionary compatibility,” 2019, R&R at *International Journal of Game Theory*

Work in Progress

- “Information exchange through secret vertical contracts,” 2019 (joint with Nicolas Riquelme)

Teaching Experience

Lecturer, Economics Department, University of Rochester

Math Camp for new graduate students, Summer 2018, Summer 2019, Summer 2020

Teaching Assistant, Economics Department, University of Rochester

Game Theory (Undergraduate), Fall 2017, Fall 2018, Fall 2019, Fall 2020 (Professor Paulo Barelli)

Modern Value Theory II (Graduate), Spring 2020 (Professor Paulo Barelli)

Teaching Assistant, Simon Business School, University of Rochester

Game Theory for Managers (MBA), Spring 2019, Spring 2020 (Professor Jeanine Miklós-Thal)

Advanced Pricing (MBA), Spring 2020 (Professor Jeanine Miklós-Thal)

Teaching Assistant, Political Science Department, University of Rochester

Game Theory (Undergraduate), Spring 2019 (Professor Anastassios Kalandrakis)

Teaching Assistant, Department of Economics, Sogang University

Economics Statistics Course, Fall 2013 (Professor Sung-Ha Hwang)

Mathematical Economics Course (Graduate), Fall 2013 (Professor Sung-Ha Hwang)

Fellowships, Scholarships, and Awards

Graduate Fellowship and Tuition Scholarship, University of Rochester, 2015-2020

Tapan Mitra Prize, University of Rochester, 2020

The Wallis Institute of Political Economy Fellowship, University of Rochester, 2017-2018

Norman M. Kaplan Memorial Prize, University of Rochester, 2017

Albatross Fellowship, Sogang University, 2013-2014

Merit-based Scholarship, Sogang University, 2012-2013

Dean's List, Prize for top 1% in Department of Economics, Sogang University, 2012-2013

Merit-based Scholarship, Sogang University, 2007-2008

Conference Presentations

International Conference on Game Theory at Stony Brook, 2019

Others

Languages: Korean (native), English (fluent)

Computer Skills: Mathematica

References

Professor Paulo Barelli

Department of Economics
University of Rochester
Rochester, NY 14627, USA.
Phone: +1 (585)-275-8075
E-mail: paulo.barelli@rochester.edu

Professor Srihari Govindan

Department of Economics
University of Rochester
Rochester, NY 14627, USA.
Phone: +1 (585)-275-7214
E-mail: s.govindan@rochester.edu

Jeanine Miklós-Thal

Simon Business School
University of Rochester
Rochester, NY 14627, USA.
Phone: +1 (585)-276-5166
E-mail: jeanine.miklos-thal@simon.rochester.edu

Professor Yu Awaya

Department of Economics
University of Rochester
Rochester, NY 14627 USA.
Phone: +1 (585) 275-5781
E-mail: yuawaya@gmail.com

Cheating and compensation in price-fixing cartels

(Revision requested by “Journal of Economic Theory”)

While deliberate cheating and inter-firm compensation are often observed in the real-world cartels, existing literature fails to explain both in a unified framework. This paper aims to provide a theoretical explanation of “*cheating and compensation on-path of play*” using a canonical model of price-fixing collusion. The novel mechanism relies on firms playing *mixed strategies* allowing for *coordination* on monopoly price and *price-cutting* to happen with positive probability, together with a *compensation scheme* that punishes price-cutters. The mechanism is optimal in a restricted class of equilibria, and such price-cutting and compensation are *necessary* parts for any symmetric collusive equilibrium.

Opportunism in Vertical Contracting: A Dynamic Perspective

(with Jeanine Miklós-Thal)

This paper proposes a dynamic approach to modeling opportunism in bilateral vertical contracting between an upstream monopolist and competing downstream firms. Unlike previous literature on opportunism which has focused on games in which the upstream firm makes simultaneous secret offers to the downstream firms, we model opportunism as a consequence of asynchronous recontracting in an infinite-horizon continuous-time model. We find that the extent of opportunism depends on the absolute and relative reaction speeds of the different bilateral supplier-retailer pairs and on the firms’ discount rate. Patience, fast reaction speeds, and asymmetries in reaction speeds across supplier-retailer pairs are shown to alleviate the opportunism problem.

Communication in Hub-and-Spoke Cartels

Motivated by recent antitrust cases, a *hub-and-spoke* collusive mechanism involving multiple downstream firms and their common upstream supplier is explored. More precisely, we study a repeated sequential game where downstream firms receive private demand signals and send private messages to the upstream supplier, who then makes a non-binding downstream price recommendation. Direct information exchange among horizontal competitors is not allowed. For sufficiently high discount factors, we construct a collusive equilibrium in which firms can sustain nearly perfect industry-wide monopoly outcomes if the upstream firm is also involved in the collusive agreement. The upstream firm’s participation in a cartel is shown to be crucial to achieving a truthful indirect communication and efficient outcomes.

Incentives under equal-pay constraint and subjective peer evaluation

(with Yu Awaya)

We study a moral hazard problem for a firm with multiple workers where the firm cannot discriminate workers' wages—*equal-pay constraint*—and evaluate workers' performances only through peers—*subjective peer evaluation*. More precisely, each worker privately chooses effort level, which generates private signals received by his peers. The firm solicits peer evaluations, which are not verifiable. The wage must be equal across workers *ex-post*. We show that the firm can still provide incentives to put forth effort if signals are correlated, and higher efforts lead to higher correlation. The proposed wage scheme is optimal within the class of equal-pay contracts, and when workers are symmetric, it is optimal among all wage contracts.

Joint market dominance through exclusionary compatibility

(Revision requested by "International Journal of Game Theory")

This paper studies an infinite-horizon oligopoly model in a network good market with segmented demands. In each period, three firms make compatibility decisions before engaging in price competition. The firm that made a sale in the last period provides a better quality of the product in terms of installed base customers, which can be shared with his competitors through compatibility. I show that compatibility can be used as an exclusionary device even though it intensifies short-run price competition when the firms are sufficiently patient. Under certain conditions, this is the only stable prediction with respect to a dynamic analogue of strong stability in network formation games (Dutta and Mutuswami, 1997).

Information exchange through secret vertical contracts

(with Nicolas Riquelme, Work-in-Progress)

Can downstream firms exchange their private demand forecasts through secret vertical contracts? This paper provides a positive answer to this question. We study a common agency problem where two downstream firms, who receive private demand signals about common demand states and operate in separate final markets, simultaneously offer a secret menu of two-part tariff contracts to their common supplier. Upon accepting a particular contract, each downstream firm may learn the other firm's demand signal, which allows them to set a more efficient quantity level. It is shown that a perfect Bayesian equilibrium exists in which information is fully transmitted, and the downstream firms extract nearly first-best industry surplus under certain conditions. The implications of our results on antitrust regulations are also discussed.

Min Fang

University of Rochester
Department of Economics
Harkness Hall
Rochester, NY 14627

Phone: (201) 208-9778
Email: min.fang@rochester.edu
Homepage: www.minfang.info
GitHub: [ethanminfang](https://github.com/ethanminfang)

Personal

Chinese Citizen (F1 Visa, US; OWP-expected, Canada).

Education

2015-2021(exp) University of Rochester, Department of Economics
Ph.D. Candidate in Economics
Committee: Yan Bai (co-advisor), Narayana Kocherlakota (co-advisor), Mark Bills, Ronni Pavan

2014-2015 Yeshiva University, Department of Economics
M.S. in Quantitative Economics

2010-2014 Zhejiang University, School of Economics & Chu Kochen Honors College
B.A. in Economics

Interests

Substantive: Macroeconomics, Monetary Economics, Financial Economics, Urban Economics

Methodology: Computational Methods, Time Series Econometrics

Research

Working Paper

Lumpy Investment, Uncertainty, and Monetary Policy [\[Link\]](#)
(**Job Market Paper**)

Migration, Housing Constraints, and Inequality: A Quantitative Analysis of China [\[Link\]](#)
(with Zibin Huang) *under review*

Lumpy Debt, Monetary Policy, and Investment [\[Link\]](#)
(with Minjie Deng)

Work in Progress

Place-based Land Allocation Policy and Spatial Misallocation: Evidence from China
(with Libin Han, Zibin Huang, Ming Lu, Li Zhang)

What Do Alibaba Data Tell Us about Quality Growth in China?
(with Mark Bils, Zibin Huang, Tianchen Song)

Discussions

Entrepreneurship, Financial Frictions, and the Market for Firms, by Rafael Guntin and Federico Kochen [\[Slides\]](#)

Conference & Seminar Presentations

2021 Jan	ASSA/AEA Annual Meetings, Virtual
2020 Oct	Urban Economics Association Meeting, Virtual
2020 Oct	PhD-EVS Economics Virtual Seminar, Virtual
2020 Aug	Young Economist Society (China), Virtual
2020 Aug	Young Economists Symposium (UPenn), Virtual
2020 Aug	European Economic Association 30th Annual Congress, Virtual
2020 Aug	Econometric Society 12th World Congress, Virtual
2020 Aug	Chinese Economists Society NA Conference, Virtual
2020 Jul	CERDI et al. Joint Junior Webinar on The Economics of Migration
2019 Dec	River Campus Libraries (General Audience), University of Rochester
2019 Oct	Economic Graduate Students Conference, Washington University in St. Louis
2018 Mar	W. Allen Wallis Institute Seminar, University of Rochester

Fellowships, Scholarships, & Awards

2020-2021	Dean's Post-Field Research Dissertation Fellowship, University of Rochester
2019 Fall	River Campus Library Dataset Grant, University of Rochester
2019 Fall	Conference Travel Grant, University of Rochester
2019	Alibaba <i>Huoshui</i> Scholar, Alibaba Group
2017-2018	W. Allen Wallis Institute Fellowship (researcher in residence), University of Rochester
2017 Spring	PEPR Grant, W. Allen Wallis Institute, University of Rochester
2016-2017	Summer Research Grant (×2), University of Rochester
2015-2020	Graduate Fellowship and Tuition Scholarship (17-18 exempt), University of Rochester
2014-2015	Graduate Fellowship, Yeshiva University

Teaching

Instructor, Department of Economics, University of Rochester

2019 Summer ECO 108 Principal of Economics

Teaching Assistant, Department of Economics, University of Rochester

2019 Spring ECO 476 Macroeconomics II (Econ Ph.D)

2018 Fall ECO 209 Intermediate Macroeconomics

2018-2020 ECO 233 Applied Econometrics (×3)

2017 Fall ECO 268 Economics of Globalization

Teaching Assistant, Simon Business School, University of Rochester

2020 Fall STR401 Managerial Economics (EMBA)

2020 Spring STR422 Game Theory for Managers (EMBA)

2019-2021 GBA 463 Economics & Marketing Strategy (MSBA) (×3)

2019 Summer GBA 464 Programming for Analytics (MSBA)

2018-2019 FIN 413 Corporate Finance (MBA & MSF) (×2)

Teaching Assistant, Yeshiva University

2015 Spring ECO 1101 Intermediate Microeconomics

2014 Fall ECO 1010 Principles of Economics

External Academic Training

2017 Summer Summer School on New Structural Economics, Peking University

2020 Summer Lectures on Urban Economics, Urban Economics Association

2020 Summer SAIF-CAFR Financial Research Summer Camp, Shanghai Jiao Tong University

Others

Languages: English (fluent), Chinese (native)

Computer Skills: Julia (Computing), Stata (Data), R (Visualization), Python, MATLAB, Linux, $\LaTeX$

Seminar Organizer: [Graduate Student Chinese Economy Workshop \(GSCE\)](#)

References

Professor Yan Bai (Co-advisor)

Department of Economics
University of Rochester
Rochester, NY 14627, USA.
Phone: (+1) 585-275-4196
E-mail: yan.bai@rochester.edu

Professor Narayana Kocherlakota (Co-advisor)

Department of Economics
University of Rochester
Rochester, NY 14627, USA.
Phone: (+1) 585-275-4991
E-mail: nkocherl@ur.rochester.edu

Professor Mark Bills

Department of Economics
University of Rochester
Rochester, NY 14627, USA.
Phone: (+1) 585-738-8859
E-mail: mark.bills@rochester.edu

Professor Ronni Pavan

Department of Economics
University of Rochester
Rochester, NY 14627, USA.
Phone: (+1) 585-275-6279
E-mail: ronni.pavan@rochester.edu

Abstracts

Lumpy Investment, Uncertainty, and Monetary Policy

(Job Market Paper)

I study the impact of fluctuations in firm-level uncertainty on the effectiveness of monetary policy when investment is lumpy. I first document empirically that high uncertainty hinders firms' investment responses to monetary stimulus, especially at the extensive margin (changes in the number of firms choosing between (dis)investing or staying inactive). I then develop a heterogeneous firm New Keynesian model with random fixed costs and partial irreversibility of capital adjustment. These adjustment costs create a sizable extensive margin of investment which is more sensitive to changes in the interest rate and firm-level uncertainty than the intensive margin. Hence, monetary policy works primarily through the extensive margin of investment. Upon an uncertainty shock, firms tend to stay inactive at the extensive margin, so monetary stimulus can hardly motivate investment at the extensive margin. As a result, the effectiveness of monetary policy is reduced. I then parameterize the model. I find that its quantitative implications for both monetary policy and uncertainty are primarily shaped by the specifications of capital adjustment costs. Unlike much of the prior literature, I use the dynamic moments of investment to identify this key model element. Based on this parameterization, I show that an aggregate shock to firm-level uncertainty estimated by Bloom et al.(2018) reduces the effectiveness of monetary stimulus on investment by half. This reduction is about 85% of what I find in the data. Therefore, the effect of monetary policy depends on lumpy investment and time-varying uncertainty.

Migration, Housing Constraints, and Inequality:

A Quantitative Analysis of China

(with Zibin Huang)

We investigate the role of migration and housing constraints in determining income inequality within and across Chinese cities. Combining microdata and a spatial equilibrium model, we quantify the impact of the massive spatial reallocation of workers and the rapid growth of housing costs on the national income distribution. We first show several stylized facts detailing the strong positive correlation between migration inflows, housing costs, and imputed income inequality among Chinese cities. We then build a spatial equilibrium model featuring workers with heterogeneous skills, housing constraints, and heterogeneous returns from housing ownership to explain these facts. Our quantitative results indicate that the reductions in migration costs and the disproportionate growth in productivity

across cities and skills result in the observed massive migration flows. Combining with the tight land supply policy in big cities, the expansion of the housing demand causes the rapid growth of housing costs and enlarges the inequality between local housing owners and migrants. The counterfactual analysis shows that if we redistribute land supply increment by migrant flow and increase land supply toward cities with more migrants, we could lower the within-city income inequality by 14% and the national income inequality by 18%. Meanwhile, we can simultaneously encourage more migration into higher productivity cities.

Lumpy Debt, Monetary Policy, and Investment

(with Minjie Deng)

We study how financial heterogeneity determines firm-level investment responses to monetary policy shocks. In Compustat, a significant amount of firms hold almost zero debt, and among the firms who hold debt, both the amount and the maturity of debt vary greatly. We refer to these financial heterogeneity characteristics as *lumpy debt*. We first document that *lumpy debt* significantly affects the responses of firm investment to monetary policy shocks: firms who hold debt, hold more debt, and hold more long-term debt, are less responsive to monetary policy shocks. We then develop a heterogeneous firm model with investment, long-term and short-term debt, and default risk to interpret these facts. In the model, firms with higher leverage or more long-term debt are less responsive to monetary policy shocks because their marginal cost of external finance is high. The effect of monetary policy on aggregate investment, therefore, depends on the distribution of firm financial positions.

Place-based Land Allocation Policy and Spatial Misallocation: Evidence from China

(with Libin Han, Zibin Huang, Ming Lu, and Li Zhang)

We study how place-based land allocation policy creates spatial misallocation. Combining microdata and a spatial equilibrium model, we quantify the impact of place-based land allocation policy on spatial misallocation. Using a border regression discontinuity design on China's inland favoring urban land quota system since 2003, we first show empirical facts detailing the spatial misallocation of land prices and firm-level TFP created by the place-based land allocation policy. We then build a spatial equilibrium model featuring worker mobility, heterogeneous skills, housing ownership inequality, residential and commercial floor space constraints, and agglomeration effects. We use Census-level individual survey to solve the model results for each Chinese city and provide a unique two-stage estimation of the agglomeration parameters. In the model, spatial misallocation are created from three sources on top of limitations from natural capacity and migration costs: 1).inefficient land allocation across cities; 2).inefficient land allocation between residence and commerce; 3).reduced agglomeration effects. Counterfactuals that lower land allocation distortion across/within cities ease spatial misallocation as well as improve national productivity.

What Do Alibaba Data Tell Us about Quality Growth in China?

(with Mark Bils, Zibin Huang, and Tianchen Song)

Does the Consumer Price Index (CPI) inflation for consumer durables reflect quality growth or inflation? This well-known question lies at the core of evaluating inflation and quality growth over time, which are essential for macroeconomics. In this project, we try to account for quality growth in measuring inflation. As we know, households can substitute for low-quality goods with high-quality ones. If we do not account for quality changes when calculating the inflation, it can lead to an overestimation of the "pure" price increase. The problem is even more severe in developing countries with fast economic growth. In this study, we participate in the Huoshui Research Plan in Alibaba Group and get detailed sales data for different brands and models of mobile phones in different regions. We first measure quality growth and how much it contributes to the mobile phone's overall price growth. In the next step, we want to use data set with a broad category of commodities from Alibaba and quantify the quality and price growth for China's whole retailing market.

Victor Hernandez Martinez

Department of Economics
University of Rochester
280 Hutchison Road
Rochester, NY 14627

Website: [Personal Page](#)
Email: vichdezmtnez@gmail.com
Phone: +1 (585) 490-7899
Nationality: Spanish Citizen
Last Updated: October 2020

Education

- Ph.D. Candidate, Economics, University of Rochester, 2016-2021 (Expected).
Advisors: Lisa Kahn (main), Ronni Pavan (main), Elaine Hill
- M.A. Economics, University of Rochester, 2016-2018.
- M.Sc. Economics & Public Policy, Barcelona Graduate School of Economics, 2014-2015.
- B.Sc. in Economics, University Carlos III, Spain, 2010-2014.

Research Interests

Labor Economics, Applied Microeconomics, Unemployment & Displacement, Policy Evaluation, Inequality.

Working Papers

- JMP: “Who are the Liquidity Constrained among Unemployed Workers? Answers from Conditional vs Unconditional Income Transfers” (with Kaixin Liu)
- “The Role of Human Capital Specificity for Displaced Workers: A New Approach”
- “Skill Complementarity and the Shale Boom”

Selected Work In Progress

- “Fighting Income Inequality with International Trade” (with Roman Merga)

Publications

- “Social distancing merely stabilized COVID-19 in the US” (with Aaron B. Wagner, Elaine L. Hill, Sean E. Ryan, Ziteng Sun, Grace Deng, Sourbh Bhadane, Peter Wu, Dongmei Li, Ajay Anand, Jayadev Acharya, David S. Matteson), *Stat: e302*. (2020)

Conference & Seminar Presentations

- 2020: EALE SOLE AASLE World Conference, *Berlin (Germany)*.

Appointments

- Research Assistant for Professor Elaine Hill, University of Rochester 2018 - 2020
RA Contributions:
 - “Reproductive health care in Catholic-owned hospitals” Hill, E; Slusky, D; Ginther D; (2019)
Journal of health economics 65, 48-62

Research Grants

- River Campus Data Grant, University of Rochester, 2020

Teaching Experience

Instructor

- *Econometrics (Undergraduate ECO231W)*, University of Rochester. Summer 2020
Evaluations: Teaching Skills: 4.7/5 Overall Teacher Rating 4.5/5

Teaching Assistant

- *Econometrics (Undergraduate ECO231W)*, University of Rochester. Fall 2020, Fall 2019, Fall 2018. Instructor: Prof. Ronni Pavan.
- *Econometrics (Undergraduate ECO231W)*, University of Rochester. Spring 2020, Spring 2019. Instructor: Prof. Kegen Tan.
- *Research in Applied Econometrics (Graduate, ECO 487)*, University of Rochester. Spring 2019. Instructor: Prof. Ronni Pavan.

Previous Employment

- European Central Bank *Frankfurt am Main (Germany)*
Trainee Monetary Policy Strategy Division 2016
- INSEAD *Singapore*
Research Associate in Economics 2015-2016

Honors and Awards

- Tapan Mitra Prize: Best Fifth Year Paper in Empirical Economics, University of Rochester, 2020.
- Economics Department Ph.D. Fellowship and Scholarship, University of Rochester, 2016-2021.
- Tuition Scholarship, Barcelona Graduate School of Economics, 2014-2015.

Others

- Computer Skills: Stata, Matlab, Julia, Python, R, L^AT_EX
- Languages: English (Fluent), Spanish (Native), French (Basic)

Zibin Huang

Department of Economics
University of Rochester
Harkness Hall
Rochester, NY 14627, USA.

Phone: +1 (585) 358 95 66
E-mail: zhuang18@ur.rochester.edu
Homepage: <https://www.zibinhuang.com/>
Citizenship: P.R.China (F1 Visa)

Education

Ph.D. in Economics, University of Rochester, USA, 2021 (expected)

Advisor: Ronni Pavan (Main), Lisa Kahn

M.A. in Economics, University of Rochester, USA, 2017

M.A. in Economics, Vanderbilt University, USA, 2015

B.S. in Agricultural Resources and Environment, Zhejiang University, China, 2013

Research Fields

Applied Economics, Labor Economics, Urban Economics

Working Papers

“Peer Effects, Parental Migration and Children’s Human Capital: A Spatial Equilibrium Analysis in China”, **Job Market Paper** (*Granted by Doctoral Fellowships of Chiang Ching-kuo Foundation*)

“Fertility, Child Gender, and Parental Migration Decision: Evidence from One Child Policy in China”, with Lin Lin and Junsen Zhang (*Reject and Resubmit in The Review of Economics and Statistics*)

“Migration, Housing Constraint, and Inequality: A Quantitative Analysis of China”, with Min Fang (*Under Review in The Economic Journal*)

“Labor Demand During Covid-19: Evidence from Online Job Postings in China”, with Qin Chen, Lisa Kahn and Geunyong Park

“Peer Effects of Migrant and Left-behind Children: Evidence from Classroom Random Assignment in China”

Work In Progress

“What Do Alibaba Data Tell Us about Price and Quality in China”, with Mark Bils, Min Fang and Tianchen Song (*Granted by Alibaba Huoshui Research Plan*)

“Place-based Land Allocation Policy and Spatial Misallocation: Evidence from China”, with Min Fang, Libin Han, Ming Lu and Li Zhang

“Outsourcing of Jobs in Multinational Companies: Evidence from Online Job Postings in the U.S. and China”, with Qin Chen, Lisa Kahn, Lindsay Oldenski and Geunyong Park

Teaching Experience

Teaching Assistant, University of Rochester

Econometrics (Undergraduate) – Professor Ronni Pavan (Fall 2019)

Freakonomics (Undergraduate) – Professor Lisa Kahn (Spring 2019)

Intermediate Microeconomics (Undergraduate) – Professor Steven Landsburg (Fall 2018)

Intro to Econometrics (Ph.D.) – Professor Bin Chen (Spring 2018, Spring 2020)

Math Stats/Econometrics (Ph.D.) – Professor Nese Yildiz (Fall 2017)

Applied Econometrics (Undergraduate) – Professor Bin Chen (Spring 2017)

Fellowships, Scholarships, and Awards

Doctoral Fellowships, Chiang Ching-kuo Foundation for International Scholarly Exchange, 2020

Roe L. Johns Student Travel Grants from Association for Education Finance and Policy, 2020

River Campus Library Data Grant, 2019

Best Fifth Year Paper in Empirical Economics, University of Rochester, 2019

Alibaba *Huoshui* Research Plan, Alibaba Group, 2019

Conibear Prize for Best Third Year Paper, University of Rochester, 2018

Summer Research Grant, University of Rochester Summer 2016, 2017

Graduate Fellowship and Tuition Scholarship, University of Rochester, 2015-2020

Most Outstanding Student of GPED, Vanderbilt University, 2015

James S. and Rosemary Worley Award for First Year Master Student, Vanderbilt University, 2014

Conference & Seminar Presentations

2020 EALE/SOLE/AASLE World Conference, AEA/ASSA Annual Conference*, Eastern Economic Association Annual Conference, Chinese Economists Society North America Conference*, Association for Education Finance and Policy (AEFP) Annual Conference, Graduate Students in Economics of Education Zoom (GEEZ) Seminars, Chinese Education Finance and Policy Association Virtual Seminar, Forum on Children of Migrants in Jinan University, Webinar Series on The Economics of Migration, Econometric Society World Congress, Young Economists Symposium (YES), Chinese Young Economist Society Conference, Urban Economics Association (UEA) Annual Conference, IESR at Jinan University
(Attended and Planned)

2019 Jinan University, The State University of New York at Buffalo, International Symposium on Contemporary Labor Economics (CUHK), International Symposium on Human Capital and Labor Market (CUFE)

2018 China Meeting of Econometrics Society, Chinese Economists Society Annual Conference

(* Presented by coauthor)

Referee Services

Journal of Human Resources

Others

Languages: Chinese (native), English (fluent)

Computer Skills: Stata, Julia, Matlab, C#, R, LaTeX

Seminar Organizer: Graduate Student Chinese Economy Workshop (GSCE)

References

Professor Ronni Pavan (Main Advisor)

Department of Economics

University of Rochester

Rochester, NY 14627, USA.

Phone: (+1) 585-275-6279

E-mail: ronni.pavan@rochester.edu

Professor Lisa Kahn (Advisor)

Department of Economics

University of Rochester

Rochester, NY 14627, USA.

Phone: (+1) 585-275-1871

E-mail: lisa.kahn@rochester.edu

Professor Nese Yildiz

Department of Economics

University of Rochester

Rochester, NY 14627, USA.

Phone: (+1) 585-275-5782

E-mail: nese.yildiz@rochester.edu

Professor Junsen Zhang

Department of Economics

The Chinese University of Hong Kong

Shatin, NT, Hong Kong, China.

Phone: (+852)3943-8186

E-mail: jszhang@cuhk.edu.hk

Peer Effects, Parental Migration and Children's Human Capital: A Spatial Equilibrium Analysis in China

(Job Market Paper: Abstract)

In China, migrant children are disadvantaged and sometimes cannot enroll in public schools in migration destinations. Some migrant workers have to leave their children behind in hometown, which causes the left-behind children problem. In this study, I first identify the peer effects of migrant children and left-behind children on their classmates using classroom random assignment. I then analyze the human capital consequences of the enrollment restriction on migrant students within a spatial equilibrium model. My results show that there are negative spillovers from migrant and left-behind students. The negative effect is generally larger from left-behind students, but both shrink over time. In the counterfactual analysis, I find that if the enrollment restriction on migrant children is relaxed, fewer children will be left behind, migration will increase, and average human capital in the society will also increase. Low-skill families from small cities benefit most. The policy works through two channels. First, it directly increases enrollment in good public schools and alleviates the left-behind children problem. Second, it attracts more parents to take their left-behind children to migrate with them and indirectly reduces the total spillovers. This is the first formal quantitative analysis of public school enrollment policy in China.

Fertility, Child Gender, and Parental Migration Decision: Evidence from One Child Policy in China

(with Lin Lin and Junsen Zhang)

Reject and Resubmit in The Review of Economics and Statistics

We investigate the effect of the number and gender of children on parents' rural-to-urban migration in China and try to evaluate the effect of One Child Policy (OCP) on China's urbanization. We propose a new semi-parametric method to solve an identification difficulty in previous studies and estimate the two effects. Results show that the addition of one girl in the family will result in a 13.7% increase in the probability that both parents in rural households migrate to urban areas; whereas the addition of one boy will result in a 24.3% increase in this probability. It implies that the reduction of the number of children will hinder the parental migration. Comparing to the traditional instrumental variable method, we find that without considering the effect of child gender, the estimate for the effect of the number of children will be heavily downward biased and lead to an opposite policy implication.

Migration, Housing Constraints, and Inequality: A Quantitative Analysis of China

(with Min Fang)

Under Review in The Economic Journal

We investigate the role of migration and housing constraints in determining income inequality within and across Chinese cities. Combining microdata and a spatial equilibrium model, we quantify the impact of the massive spatial reallocation of workers and the rapid growth of housing costs on the national income distribution. We first show several stylized facts detailing the strong positive correlation between migration inflows, housing costs, and imputed income inequality among Chinese cities. We then build a spatial equilibrium model featuring workers with heterogeneous skills, housing constraints, and heterogeneous returns from housing ownership to explain these facts. Our quantitative results indicate that the reductions in migration costs and the disproportionate growth in productivity across cities and skills result in the observed massive migration flows. Combining with the tight land supply policy in big cities, the expansion of the housing demand causes the rapid growth of housing costs, and enlarges the inequality between local housing owners and migrants. The counterfactual analysis shows that if we redistribute land supply increment by migrant flow and increase land supply toward cities with more migrants, we could lower the within-city income inequality by 14% and the national income inequality by 18%. Meanwhile, we can simultaneously encourage more migration into higher productivity cities.

Labor Demand during the Covid-19: Evidence from Online Job Postings in China

(with Qin Chen, Lisa Kahn and Geunyoung Park)

In this paper, we investigate the impact of the Covid-19 pandemic on China's labor market using a novel online job posting data set. The data is scraped from job search websites and covers most of the online job postings in China. The results show that the number of online job postings declined by 40% at the beginning of the pandemic hit and bounced back quickly after February. The number of job postings returned to the level before the Covid-19 in May. After controlling for seasonality and year trend, we find that 1,000 new deaths is associated with 12%-36% decrease in the online job postings. The service and leisure sector experienced the largest losses and the public sector and the primary industries were hurt the least. High-end industries such as IT and finance are also less vulnerable to this negative shock. Occupations that are more feasible for working from home and with more non-routine works, also suffer from the Covid-19 crisis as other occupations. This is the first study discussing the labor market in China during the Covid-19 crisis and gives the first picture of how China's labor demand reacts when hit by the pandemic.

Place-based Land Allocation Policy and Spatial Misallocation: Evidence from China

(with Min Fang, Libin Han, Ming Lu and Li Zhang)

We study how place-based land allocation policy creates spatial misallocation. Combining microdata and a spatial equilibrium model, we quantify the impact of place-based land allocation policy on spatial misallocation. Using a border regression discontinuity design on China's inland favoring urban land quota system since 2003, we first show empirical facts detailing the spatial misallocation of land prices and firm-level TFP created by the place-based land allocation policy. We then build a spatial equilibrium model featuring worker mobility, heterogeneous skills, housing ownership inequality, residential and commercial floor space constraints, and agglomeration effects. We use Census-level individual survey to solve the model results for each Chinese city and provide a unique two-stage estimation of the agglomeration parameters. In the model, spatial misallocation are created from three sources on top of limitations from natural capacity and migration costs: 1).inefficient land allocation across cities; 2).inefficient land allocation between residence and commerce; 3).reduced agglomeration effects. Counterfactuals that lower land allocation distortion across/within cities ease spatial misallocation as well as improve national productivity.

What Do Alibaba Data Tell Us about Price and Quality in China?

(with Mark Bils, Min Fang, Libin Han and Tianchen Song)

Does the Consumer Price Index (CPI) inflation for consumer durables reflect quality growth or inflation? This well-known question lies at the core of the evaluation of inflation and quality growth over time, which are essential for macroeconomics. In this project, we try to account for quality growth in measuring inflation. As we know, households can substitute for low-quality goods with high-quality ones. If we do not account for quality changes when calculating the inflation, it can lead to an over-estimation of the "pure" price increase. The problem is even more severe in developing countries with fast economic growth. In this study, we participate in the Huoshui Research Plan in Alibaba Group and get detailed sales data for different brands and models of mobile phones in different regions. We first measure quality growth and how much it contributes to the overall price growth of the mobile phone. In the next step, we plan to use data set with a broad category of commodities from Alibaba and quantify the quality and price growth for China's whole retailing market.

Chen Kan

Department of Economics	Phone: +1 (585) 286 7318
University of Rochester	E-mail: ckan2@ur.rochester.edu
Harkness Hall	Homepage: www.chenkanecon.com
Rochester, NY 14627, USA.	Citizenship: China (F1 Visa)

Education

Ph.D. in Economics, University of Rochester, USA, 2016-2021 (expected)
B.Sc. in Economics and Finance, Hong Kong University of Science and Technology (HKUST), 2016
Exchange Study, University of California, Los Angeles, USA, Winter and Spring 2015

Research Fields

Monetary Policy, Macroeconomics

Working Papers

“Flattening of the Phillips Curve: Causes and Their Policy Implications” (Job Market Paper)
“International Monetary Policy Cooperation: A Dynamic Solution to Zero Lower Bound”

Work In Progress

“The Effects of Transitory Shocks on Long Bond Returns”

Teaching Experience

Instructor, University of Rochester
Intermediate Macroeconomics (Spring 2020)
Teaching Assistant, University of Rochester
Corporate Finance – Professor Michael Gofman (Fall 2017, 2018, 2019)
Intermediate Macroeconomics – Professor Mark Bills (Fall 2018, 2019)
Money, Credit and Banking – Professor Narayana Kocherlakota (Spring 2019)

Fellowships, Scholarships, and Awards

Graduate Fellowship and Tuition Scholarship, University of Rochester, 2016-
Summer Research Grant, University of Rochester Summer 2018
First Class Honor, HKUST, 2016
Mr Armin & Mrs Lillian Kitchell Undergraduate Research Award, second runner-up, HKUST, 2016
Scholarship Scheme for Continuing Undergraduate Students, HKUST, 2013-2015

Others

Languages: English (fluent), Mandarin (native), Cantonese (conversational)

Computer Skills: Matlab, Julia, Stata, R

References

Professor Narayana Kocherlakota (Advisor)

Department of Economics

University of Rochester

Rochester, NY 14627, USA.

Phone: (+1) 585-275-4991

E-mail: nkocherl@ur.rochester.edu

Professor Yan Bai

Department of Economics

University of Rochester

Rochester, NY 14627, USA.

Phone: (+1) 585-275-4196

E-mail: yan.bai@rochester.edu

Professor Gaston Chaumont

Department of Economics

University of Rochester

Rochester, NY 14627, USA.

Phone: (+1) 585-275-3968

E-mail: gaston.chaumont@rochester.edu

Armen Khederlarian

Department of Economics
University of Rochester
280 Hutchison Road
Rochester, NY 14627

Phone: +1 (585) 754-0757
Email: armen.khederlarian@gmail.com
[Personal Website](#)
Citizenship: Germany, U.S. Green Card (Expected)

Education

Ph.D. Candidate, Economics, University of Rochester, 2015-2021 (Expected).

Committee: George Alessandria (Advisor), Mark Bils, Yan Bai

M.A. Economics, University of Rochester, 2015-2017.

M.A. Economics, Barcelona Graduate School of Economics, 2014-2015.

B.Sc Business Administration, ESADE Business School, Barcelona, 2003-2008.

Research Fields

International Trade, Development & Macroeconomics

Working Papers

“Inventories, Input Costs and Productivity Gains from Trade Liberalizations”,
with Shafaat Y. Khan (*Job Market Paper*), [Link](#)

“How Does Trade Respond to Anticipated Tariff Changes? Evidence from NAFTA”,
with Shafaat Y. Khan (*Revise & Resubmit at Journal of International Economics*), [Link](#)

“Taking Stock of Trade Policy Uncertainty: Evidence from China’s Pre-WTO Accession”,
with George Alessandria and Shafaat Y. Khan, [Link](#)

Work In Progress

“Additional Gains from Trade Liberalization: Inventory Management Efficiency”,
with George Alessandria and Shafaat Y. Khan

“Pricing to Client and the Pass-Through of Shocks”,
with Roman Merga

“Stockpiling and the Expected Pandemic: China’s Trade of PPE”,
with George Alessandria and Shafaat Y. Khan

Conference & Seminar Presentations

2020 NBER International Trade Policy and Institutions, Empirical Trade Online Seminar (ETOS),
U.S. International Trade Commission*, Graduate Student International Political Economy.

2019 Midwest Macroeconomics Meetings (University of Georgia), Midwest International Trade Meetings (Indiana University), FREIT Empirical Investigations in Trade (*discussant*, University of Boulder Colorado), Lisbon Meetings in Game Theory & Applications (Lisbon School of Economics & Management).

2018 European Trade Study Group (Warsaw School of Economics).

*scheduled

Teaching Experience

Instructor, University of Rochester

Intermediate Macroeconomics (Undergraduate), 2020 Spring [Evaluations](#)

Intermediate Microeconomics (Undergraduate), 2019 Summer, [Evaluations](#)

Teaching Assistant, University of Rochester

Industrial Organization (Undergraduate), Spring 2019

International Trade (Undergraduate), Spring 2018

Macroeconomics (Graduate), Fall 2017

Fellowships, Scholarships and Awards

2020-21 Dean's Post-Field Research Dissertation Completion Fellowship, University of Rochester

2020 Edward Peck Curtis Award for Excellence in Teaching by a Graduate Student, University of Rochester

2019-20 Ronald Jones Scholar, University of Rochester

2019 Best 5th Year Paper in Empirical Economics, University of Rochester

2019 River Campus Data Grant, University of Rochester

2018-19 Lionel McKenzie Scholar, University of Rochester

2017 Summer Research Grant, University of Rochester

2015-20 Economics Department Ph.D. Fellowship and Scholarship, University of Rochester

Others

Computer Skills: Stata, Matlab, Julia, Latex

Languages: English (Fluent), German (Native), Spanish (Native), Catalan (Native), French

References

George Alessandria (Advisor)

Department of Economics

University of Rochester

Rochester, NY 14627 USA

Phone: +1 (585) 275-3096

Email: george.alessandria@rochester.edu

Mark Bils

Department of Economics

University of Rochester

Rochester, NY 14627 USA

Phone: N/A

Email: mark.bils@rochester.edu

Yan Bai

Department of Economics

University of Rochester

Rochester, NY 14627 USA

Phone: +1 (585) 275-4196

Email: yan.bai@rochester.edu

Michael Wolkoff (Teaching)

Department of Economics

University of Rochester

Rochester, NY 14627 USA

Phone: +1 (585) 275-5279

Email: michael.wolkoff@rochester.edu

Abstracts

Inventories, Input Costs and Productivity Gains from Trade Liberalizations

with Shafaat Y. Khan, Job Market Paper

Trade liberalizations and the associated input tariff reductions have been documented to increase domestic firm's productivity. We revisit this result accounting for the fact that that sourcing internationally is inventory intensive and firm's sourcing strategies are heterogeneous. When firms switch towards cheaper foreign goods and increase their inventory holdings, inputs into production are systematically understated, making firms appear more productive. Through model simulations, we show that this leads to overestimation of the elasticity of measured productivity to input tariffs under standard approaches. Controlling for import intensity and the inventory-usage in the estimation of productivity corrects for the lack of the appropriate input cost deflators. We study the relevance of this potential bias during India's trade liberalization in the early 1990s. First, we document that inventory holdings of intermediate goods increased significantly with import intensity and input tariffs. Second, we extend a standard productivity estimation procedure with a control function of the firm level input cost deflator. The mismeasurement channel accounts for around 40% of the estimated productivity gains. Consistent with the gradual adjustment to the tariff reductions, the bias in the response of firm level productivity is backloaded.

How Trade Responds to Anticipated Tariff Changes: Evidence from NAFTA

with Shafaat Y. Khan, revision requested at the Journal of International Economics

Anticipation to policy changes overstates of the elasticity of substitution, the most important parameter in international trade. Standard identification of this parameter uses tariff variation from Free Trade Agreements (FTA) and assumes that trade flows equal their consumption. However, FTAs eliminate tariffs gradually through announced phaseouts. This allows firms to delay their purchases until tariff cuts are effective while consuming their inventories. Indeed, during NAFTA's staged tariff reductions, imports experienced sizable anticipatory slumps followed by liberalization bumps. A trade model with inventories replicates these dynamics and illustrates that consumed imports provide unbiased estimates of the elasticity of substitution. We propose an empirical measure of consumed imports validated through Monte Carlo simulations. Application to the data shows that using imports instead of consumed imports overestimates the annual elasticity by 68%, the average elasticity by 16%, and increases the ratio of the long- to short-run response from 2 to 3.5.

Taking Stock of Trade Policy Uncertainty: Evidence from China's Pre-WTO Accession

with George Alessandria and Shafaat Y. Khan

We study the effects on trade from the annual tariff uncertainty about China's MFN status renewal prior to joining the WTO. We have three main findings. First, counter to the evidence elsewhere, trade increases strongly in anticipation of uncertain future increases in tariffs. Second, even though the trade response can be quite large, the probability of a tariff increase was perceived to be relatively small, with an average annual probability of non-renewal of about 5.5 percent. And third, what matters more is the expected future tariff rather than the uncertainty around it. We identify these effects using within-year variation in the risk of trade policy changes around the renewal vote and trade flows. We show that an (s, s) inventory model generates this behavior and that variation in the strength of the stockpiling in advance of the vote is increasing in the storability of goods. The model is also consistent with a sizeable fraction of the cross-industry variation in annual trade flows documented elsewhere. Our results explain why trade may hold up well in advance of a prospective policy change such as Brexit or the US escalating tariff war of 2018-19, but may fall off sharply even if expected tariff increases do not materialize.

Productivity Gains from Trade Liberalizations through More Efficient Inventory Management

with George Alessandria and Shafaat Y. Khan

We augment a standard general equilibrium model of trade with a sS ordering schedule and evaluate its implications on welfare and aggregate productivity gains. In the quantitative model, importers order larger amounts less frequently resulting in an inventory premium of foreign goods. As trade barriers fall, firms import more frequently but smaller amounts. Faster turnover leads to lower inventory holding costs and a pass-through of trade cost to marginal costs larger than one. To assess the quantitative relevance of this channel we calibrate the model to match Colombia’s producer-level data prior to the trade liberalization of the early 1990s. We compare gains from the observed trade liberalization in a standard trade model with those of the inventory-augmented one. There are two main results. First, the welfare gain from trade is 18% larger than in the standard no-inventory model. Second, the decomposition of the gain shows that more efficient inventory management accounts for 34% of the aggregate productivity gain.

Pricing to Clients and the Pass-Through of Shocks

with Roman Merga

Most of the studies on exporter’s pricing behavior focus on discrimination across markets. Less attention has been paid to how firms price discriminate across their portfolio of customers. Using novel firm-to-firm transaction level data from Colombian exports, we document three facts. First, price dispersion at the seller-product level is non-negligible and a large fraction of it is accounted for by within destination variation. Second, clients with larger shares in the exporters’ past revenues pay lower prices and their prices are adjusted more frequently. Third, prices paid by the largest clients are less sensitive to fluctuations in the exchange rate, especially when the currency appreciates. These results illustrate that firms actively price discriminate across their buyers and offer more favorable terms to their largest clients. We rationalize these facts with a model of heterogeneous buyers and sellers, costly search, random matching and menu costs.

Stockpiling and the Expected Pandemic: China’s Trade of PPE

with George Alessandria and Shafaat Y. Khan

We use high-frequency trade data in the early stages of the Pandemic to identify the size and expected spread of Covid-19 in China and the rest of the world. Specifically, we use country-level monthly trade flows of Personal Protective Equipment and Medical Devices (PPEMD) to estimate the expected future evolution of the COVID-19 shock. These expectations are measured by leveraging the composition of PPEMDs in terms of their durability. The differential build up in the stocks of goods of different durability is informative about the expected evolution of the shock. By matching the observed trade dynamics of goods with distinct durability and domestic production possibilities in an sS inventory model we can identify the expected evolution of the path of shock in real-time. Our approach is generalizable to higher frequency data and can offer a real-time monitor of a country’s health.

Alexis Orellana

Department of Economics
280 Hutchison Road
P.O. Box 270156
Rochester, NY 14627

✉: borellan@ur.rochester.edu
☎: (+1) 585-309-8075
🌐: <http://alexisorellana.github.io>

Research Interests	Labor Economics, Economics of Education, Applied Microeconomics	
Education	University of Rochester	
	• Ph.D. in Economics (ongoing)	2015-present
	• M.A. in Economics	2017
	University of Chile	
	• M.Sc. in Applied Economics (highest honors)	2013
	• B.Sc. in Electrical Engineering (highest honors)	2010
Work in Progress	“Teacher Assessment Biases and Achievement Gaps in High School” “Aspirations, Education, and Occupations” (with Keron Tan) “Assessing Teacher Quality for Disadvantaged Students” (with Josh Hollinger)	
Research Experience	RA for Professor Ronni Pavan, University of Rochester	2017-2019
	RA for Professor Keron Tan, University of Rochester	2018-2019
	RA for Professor Greg Caetano, University of Rochester	Summer 2016
	Thesis student for Professor Alejandra Mizala, University of Chile. Fondecyt (NFS equivalent) Project: “Collective Reputation, Incentives, and Teacher Quality”.	2012-13
Teaching Experience	Instructor, University of Rochester • Undergraduate: Econometrics (Summer 2019) Instructor, University of Chile • Graduate: Mathematics for Economists (Fall 2014 & Fall 2015) Teaching Assistant, University of Rochester • Undergraduate: Econometrics (Spring 2017 & Spring 2018); Labor Economics (Fall 2017); Statistics (Fall 2018); Marketing Research and Analytics (Fall 2020, Simon School of Business) • Graduate: Econometrics (Spring 2019, Econ Ph.D.); Core Statistics (Summer 2018, Simon School of Business); Economics and Marketing Strategy (Fall 2019 & Fall 2020, Simon School of Business)	

	Teaching Assistant, University of Chile - Undergraduate: Principles of Economics (Spring 2011, Fall 2012 & Spring 2012); Intermediate Microeconomics (Spring 2014) - Graduate: Economic Policy Workshop (Fall 2012, Fall 2013 & Fall 2014); Econometrics (Fall 2014)	
Other Employment	Fiscalía Nacional Económica (National Antitrust Agency) Economist, Cartels Unit and Regulated Markets Unit	2013-15
Fellowships, Scholarships and Honors	University of Rochester Summer research grant (x2).	2016-17
	University of Rochester Fellowship and tuition scholarship. Department of Economics.	2015-2020
	Conicyt (Scientific Chilean Council) Scholarship for master's degree studies in Chile.	2012-13
	University of Chile Honor List. Electrical Engineering Department, Faculty of Physical and Mathematical Sciences.	2009
	University of Chile Scholarship for undergraduate studies based on academic excellence and socioeconomic background.	2004-09
Other Activities	University of Chicago Summer School on Socioeconomic Inequality (SSSI)	August 2017
Professional Activities	Referee for <i>Journal of Human Resources</i>	
Other	Languages: Spanish (native), English (fluent) Computer Skills: Stata, Matlab, L ^A T _E X, C, Fortran	
Personal Information	Date of birth: June, 1986 Nationality: Chilean	

References

Prof. Ronni Pavan
Department of Economics
University of Rochester
Rochester, NY 14657. USA.
☎ (+1) 585-275-6279
✉ ronni.pavan@rochester.edu

Prof. Keron Tan
Department of Economics
University of Rochester
Rochester, NY 14657. USA.
✉ ttan8@ur.rochester.edu

Prof. Lisa Kahn
Department of Economics
University of Rochester
Rochester, NY 14657. USA.
☎ (+1) 585-275-1871
✉ lisa.kahn@rochester.edu

Prof. John Singleton
Department of Economics
University of Rochester
Rochester, NY 14657. USA.
✉ john.singleton@rochester.edu

Last Updated: September, 2020

Yuki Tamura

Department of Economics

University of Rochester

Harkness Hall

Rochester, NY 14627, USA.

Phone: (+1) 585-622-8304

E-mail: ytamura3@ur.rochester.edu

Homepage: <https://sites.google.com/view/yukitamura>

Citizenship: Japan (F1)

Education

Ph.D. in Economics, University of Rochester, USA, 2021 (expected).

M.A in Economics, University of Rochester, USA, 2018.

B.A. in Economics (Honors), University of Queensland, Australia, 2014.

Research Fields

Microeconomic Theory, Market Design, Social Choice, Political Economy

Publication

- Takayama, Tamura, and Yeo, "Nash Equilibrium and Party Polarization in an Electoral Model with Mixed Motivations," *Journal of Public Economic Theory*, 21(2), pp. 219-240, 2019.

Working Papers

- Tamura and Hosseini, "The Crawler: Three Equivalence Results for Object (Re)allocation Problems when Preferences Are Single-peaked," 2020. (R&R at *Journal of Economic Theory*)
- Tamura, "For Object Reallocation Problems when Preferences Are Single-peaked: Two Characterizations of the Crawler," 2020.
- Tamura, "Object Reallocation Problems with Single-dipped Preferences," 2020.
- Tamura, "Endowment Manipulation in Probabilistic Assignment Problem," 2020.
- Altuntaş and Tamura, "On the Strategy-proof Rule of k Names," 2020.
- Novoa, Takayama, Tamura, and Yeo, "Policy Polarization, Primaries and Strategic Voters," 2020.

Work In Progress

- "Fair Resource Redivision when Preferences Are Single-peaked"
- "Endowment Manipulation in Probabilistic Assignment Problem: Impossibility Results"
- "Partial Implementation Invariance in Claims Problems," with Bas Dietzenbacher and William Thomson

Teaching Experience

- Teaching Assistant at University of Rochester (2017 - 2020)
 - Fair Allocation, Spring 2020, Spring 2019
 - Principles of Economics, Spring 2020
 - Economic Statistics, Spring 2018
 - Intermediate Microeconomics, Fall 2019, Fall 2018, Fall 2017
- Teaching Assistant at University of Queensland (2013-2014)
 - Microeconomic Theory, Semester 1, 2014, Semester 1, 2013
 - Quantitative Economic and Business Analysis B, Semester 2, 2013
 - Game Theory and Strategy, Semester 2, 2013

Fellowships, Scholarships, and Awards

- Graduate Fellowship and Tuition Scholarship, University of Rochester, 2015-2020
- Akira Takayama Memorial Prize, University of Rochester, 2019-2020
- Yasuo Uekawa Scholarship, University of Rochester, 2017-2019
- Distinguished Teaching Awards, University of Queensland, 2013, 2014
- Dean's Commendation for Academic Excellence, University of Queensland, 2014
- Dean's Commendation for High Achievement, University of Queensland, 2010-2013
- Summer Research Scholarship, University of Queensland, Summer 2012

Conference and Seminar Presentations (* canceled due to COVID-19)

- | | |
|------|---|
| 2020 | Osaka University, Keio University, Waseda University, The 15th Meeting of the Society for Social Choice and Welfare (Mexico city)*, The 6th World Congress of the Game Theory Society (Budapest)* |
| 2019 | 5th International Workshop on Matching Under Preferences (Ascona), 2019 Conference on Economic Design (Budapest), International Conference on Applied Mathematics, Modeling and Computational Science (Waterloo), 2019 Ottawa Microeconomic Theory Workshop |
| 2018 | The 14th Meeting of the Society for Social Choice and Welfare (Seoul), 2018 Ottawa Microeconomic Theory Workshop |
| 2015 | The 2015 Australasian Economic Theory Workshop (Melbourne) |

Professional Service

- Referee for: *International Journal of Game Theory*, *Review of Economic Design*

Others

- Languages: Japanese (native), English (fluent)

References

Professor William Thomson (Advisor)

Department of Economics

University of Rochester

Rochester, NY 14627, USA.

Phone: (+1) 585-275-2236

E-mail: william.thomson@rochester.edu

Professor Srihari Govindan

Department of Economics

University of Rochester

Rochester, NY 14627, USA.

Phone: (+1) 585-275-7214

E-mail: s.govindan@rochester.edu

Professor Paulo Barelli

Department of Economics

University of Rochester

Rochester, NY 14627, USA.

Phone: (+1) 585-275-8075

E-mail: paulo.barelli@rochester.edu

Professor Steven Landsburg

Department of Economics

University of Rochester

Rochester, NY 14627, USA.

Phone: (+1) 585-275-4971

E-mail: steven@landsborg.com

The first three papers have to do with resource reallocation when resources are indivisible, so-called “objects”, and each agent is endowed with one object and receives one object. If preferences are strict but otherwise unrestricted, the Top Trading Cycles rule (TTC) is the leading rule, being the only rule satisfying the following three properties; the requirement of efficiency (in the sense of Pareto); the basic participation requirement that each agent should find his assignment as least as desirable as his endowment, “individual rationality”; and the strategic requirement that no agent ever benefit by misrepresenting his preferences, “strategy-proofness”.

The Crawler: Three Equivalence Results for Object (Re)allocation Problems when Preferences Are Single-peaked

(with Hadi Hosseini; Job Market Paper)

On the domain of single-peaked preferences, Bade (2019) defines a new rule, the “crawler”, which also satisfies the three properties listed above. We derive several important structural properties of this rule:

1. The crawler and a naturally defined “dual” rule (Bade, 2019) are actually the same.
2. The crawler selects the same allocation regardless of the choice of orders over the object set that preserves single-peakedness of a preference profile.
3. The crawler does not always select an allocation in the core. However, for object allocation problem, the “probabilistic version” of the crawler obtained by choosing the endowment profile at random, and applying the original definition, is the same as the “core from random endowments”.

Our first two theorems provide evidence that the crawler does not favor particular agents at the expense of the others. Although the crawler does not always select an allocation from the core, our third theorem mitigates this fact, and should further strengthen the appeal of this rule.

For Object Reallocation Problems when Preferences Are Single-peaked: Two Characterizations of the Crawler

Apart from efficiency, individual rationality, and strategy-proofness, we identify additional interesting properties that the crawler satisfies. We establish two characterizations of this rule based on an invariance property, “adjacent-endowment-swapping invariance”. This property concerns the opportunity that agents have to manipulate a rule through the resources they own. Specifically, it requires that if two neighbors each of whom prefers the other agent’s endowment to his own swap their endowments, the same allocation should be chosen as for the initial problem. Our first characterization also involves “separability”. Consider an agent who is assigned his endowment. Because he did not contribute to, nor got anything from, the other agents, he may be regarded as “irrelevant”. So in the sub-problem obtained by removing

that agent and everything else is the same as in the original problem, it is natural to require that the same assignments be chosen for the other agents as in the initial problem. Our second characterization involves “non-bossiness”: if an agent’s preferences have changed but his assignment is left unchanged by the rule, nobody else’s assignment should be changed. Our main results state that:

1. The crawler is the only rule satisfying individual rationality, adjacent-endowment-swapping invariance, and separability.
2. The crawler is the only rule satisfying individual rationality, strategy-proofness, adjacent-endowment-swapping invariance, and non-bossiness.

Object Reallocation Problems with Single-dipped Preferences

On the unrestricted preference domain, TTC is also the only rule satisfying individual rationality, strategy-proofness, and “endowment-swapping-proofness” (Fujinaka and Wakayama, 2018). We focus on the domain of single-dipped preferences instead: There is an order over the object set such that each agent has a unique worst object; the further his assignment is from his worst object, in either direction, the more desirable it is for him. We ask if the above characterization as well as Ma’s characterization of TTC hold on this domain. We show that on the single-dipped domain:

1. TTC is the only rule satisfying efficiency, individual rationality, and strategy-proofness.
2. TTC is the only rule satisfying individual rationality, strategy-proofness, and endowment-swapping-proofness.

Returning to the unrestricted domain, TTC is not “obviously” strategy-proof (Li, 2017). We again ask if this result holds on the single-dipped domain. On this domain:

3. TTC is obviously strategy-proof.
4. The domain of single-dipped preferences is a maximal domain on which TTC is obviously strategy-proof.

Endowment Manipulation in Probabilistic Assignment Problem

For probabilistic assignment, we investigate the existence of rules which satisfy efficiency, individual rationality, and one of several types of endowment manipulation. An agent may manipulate a rule on his own, or in conjunction with others in multiple ways. We study three types of endowment manipulation by individuals:

1. hiding part of his endowment;
2. destroying part of his endowment; and
3. artificially enlarging his endowment,

and two types of endowment manipulation by pairs of agents:

1. one agent borrowing part of the other's endowment; and
2. one agent transferring part of his endowment to the other.

We propose a rule, which we call the “upward trading cycles rule”, that satisfies efficiency and individual rationality, and is in fact immune simultaneously to all forms of these endowment manipulations.

On the Strategy-proof Rule of k Names

(with Aelya Altuntaş)

We study a collective decision problem described by a profile of preference relations of agents over alternatives when a number k of alternatives have to be selected. While preferences are defined over the alternatives, an outcome is a set of alternatives. We extend preferences over alternatives to preferences over sets of alternatives in such a way that each set of alternatives is evaluated according to the rank of the most preferred alternative in the set. Relative to our extension, we define efficiency, strategy-proofness, and “size-monotonicity”: as the number of alternatives increases from k to $k + 1$, each agent should find the new outcome at least as desirable as the original outcome. We define a subfamily of sequential priority rules where the priorities over the agent set satisfy two conditions, “independence of lower priorities” and “independence of size”. The first condition requires that an agent's preferences should not influence the priorities that are higher than his. The second condition requires that priority order should not depend on k . Our main result states that:

1. Sequential priority rules associated with priority orders satisfying independence of lower priorities and independence of size are the only rules satisfying efficiency, strategy-proofness, and size-monotonicity.