UNIVERSITY OF ROCHESTER
Economics

Job Market Candidates
2022-2023
<table>
<thead>
<tr>
<th>NAME</th>
<th>Job Market Paper</th>
<th>FIELDS</th>
<th>REFERENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stylianos Christodoulou</td>
<td><em>Evaluation of Higher Rental Subsidies and Their Impact on Wealthy Neighborhoods</em></td>
<td>• Applied Microeconomics</td>
<td>Lisa Kahn*</td>
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<td></td>
<td></td>
<td>• Public</td>
<td>Ronni Pavan</td>
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<td></td>
<td></td>
<td>• Urban Economics</td>
<td>John Singleton</td>
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<td>• Labor Economics</td>
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<tr>
<td>Lorenz Ekerdt</td>
<td><em>Demand for Quality and the Rise of Specialized Firms</em></td>
<td>• Macroeconomics</td>
<td>Mark Bils*</td>
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<td></td>
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<td>• Economic Growth</td>
<td>George Alessandria</td>
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<td></td>
<td>• International Trade</td>
<td>Yan Bai</td>
</tr>
<tr>
<td>Naoki Fujiwara</td>
<td><em>Low Prices and Resale Markets</em></td>
<td>• Economic Theory</td>
<td>Paulo Barelli*</td>
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<td></td>
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<td>• Political Economy</td>
<td>Yu Awaya</td>
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<td>• Formal Political Theory</td>
<td>Mark Fey</td>
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<tr>
<td>Jeremy Kettering</td>
<td><em>Large Shocks and Uncertainty in Beauty Contests</em></td>
<td>• Microeconomic Theory</td>
<td>Paulo Barelli*</td>
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<td>• Game Theory</td>
<td>Asen Kochov*</td>
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<td>• Financial Economics</td>
<td>Srihari Govindan</td>
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<td>• Decision Theory</td>
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<tr>
<td>Armen Khederlarian</td>
<td><em>Trade-Policy Dynamics: Evidence from 60 Years of U.S.-China Trade</em></td>
<td>• International Trade</td>
<td>George Alessandria</td>
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<td>• International Macroeconomics &amp; Development</td>
<td>Kim J. Ruhl</td>
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<td>Joseph B. Steinberg</td>
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<td>Sandro Steinbach</td>
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<tr>
<td>Kenwin Maung</td>
<td><em>Large Network Autoregressions with Unknown Adjacency Matrix</em></td>
<td>• High-Dimensional Econometrics</td>
<td>Bin Chen*</td>
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<tr>
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<td>• Time Series</td>
<td>Nese Yildiz</td>
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<tr>
<td></td>
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<td>• Financial Networks</td>
<td>Michael Gofman</td>
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</tbody>
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*Advisor
<table>
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<tr>
<th>Name</th>
<th>Research Focus</th>
<th>Specializations</th>
<th>Advisors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexis Orellana</td>
<td>Neighbors' Spillovers on High School Choice</td>
<td>• Labor Economics • Economics of Education • Applied Microeconomics</td>
<td>Josh Goodman Marcus Winters Ronni Pavan Kegon Tan</td>
</tr>
<tr>
<td>Geunyong Park</td>
<td>Investment Stimulus, Automation and Skill Demand</td>
<td>• Technological Change • Labor Economics • Public Economics • Urban Economics</td>
<td>Lisa Kahn* Ronni Pavan John Singleton</td>
</tr>
<tr>
<td>Xiaomei Sui</td>
<td>Uneven Firm Growth in a Globalized World</td>
<td>• International Economics • Macroeconomics • Economic Growth and Development</td>
<td>Yan Bai* George Alessandria Gaston Chaumont</td>
</tr>
<tr>
<td>Soo Kyung Woo</td>
<td>Real Exchange Rate and Net Trade Dynamics: Financial and Trade Shocks</td>
<td>• International Macroeconomics • International Trade • Macroeconomics</td>
<td>George Alessandria* Yan Bai Narayana Kocherlakota</td>
</tr>
<tr>
<td>Kai-Jie Wu</td>
<td>The Rise of Specialized Firms</td>
<td>• Macroeconomics • Economic Growth • Labor Economics</td>
<td>Mark Bils* Lisa Kahn Yan Bai</td>
</tr>
</tbody>
</table>

*Advisor
Stylianos Christodoulou

University of Rochester
Department of Economics
116A Harkness Hall
Rochester, NY 14623

Email: s.christodoulou@rochester.edu
Website: schristodoulou.info
Phone: (585) 694 3997

EDUCATION

- Ph.D. in Economics, University of Rochester 2017.8–2023 (expected)
- Erasmus exchange student, Universidad Carlos III de Madrid 2016.1–2016.6
- B.Sc. in Economics, University of Cyprus 2013.9–2017.7

FIELDS OF INTEREST

- Applied Microeconomics, Public economics, Urban Economics, Labor Economics

WORKING PAPERS

- Evaluation of Higher Rental Subsidies and Their Impact on Wealthy Neighborhoods (Job Market Paper), September 2022
- Local Labor Market Composition Changes and Their Effect on Major Choice, July 2020
- Occupational Sorting with Heterogeneous Employer Learning Rates, September 2019

RELATED EXPERIENCE

- Research Assistant
  University of Cyprus for Professor Dimitrios Xefteris  Summer 2017

- Referee Service
  Journal of Human Resources

- Teaching Assistant
  Economic Statistics  Fall 2019, Spring 2021, Fall 2021, Spring 2022
  Financial Econometrics  Spring 2021
  Econometrics  Spring 2020
  Introduction to Microeconomics  Fall 2020

REFERENCES

Lisa B. Kahn (Advisor)
University of Rochester - Department of Economics
219 Harkness Hall, University of Rochester, Rochester, NY 14627, USA.
Phone: (585) 275-1871
E-mail: lisa.kahn@rochester.edu
Ronni Pavan  
University of Rochester - Department of Economics  
221 Harkness Hall, University of Rochester, Rochester, NY 14627, USA.  
Phone: (585) 275-6279  
E-mail: ronni.pavan@rochester.edu

John D. Singleton  
University of Rochester - Department of Economics  
230 Harkness Hall, University of Rochester, Rochester, NY 14627, USA.  
Phone: (303) 549-3983  
E-mail: john.singleton@rochester.edu

OTHER EXPERIENCE

<table>
<thead>
<tr>
<th>Service</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Accreditation service for Cyprus Ministry of Education</td>
<td>2017.6</td>
</tr>
<tr>
<td>Summer internship at EY</td>
<td>2014.6 – 2014.7</td>
</tr>
<tr>
<td>Military service in the Cypriot National Guard</td>
<td>2012.6 – 2013.9</td>
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SCHOLARSHIPS AND AWARDS

<table>
<thead>
<tr>
<th>Scholarship Description</th>
<th>Date</th>
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<tbody>
<tr>
<td>Graduate Fellowship and Tuition Scholarship, University of Rochester</td>
<td>2017-2022</td>
</tr>
<tr>
<td>President of the Republic’s award for highest GPA in University of Cyprus</td>
<td>2017</td>
</tr>
<tr>
<td>Highest GPA in Faculty of Economics and Management, University of Cyprus</td>
<td>2017</td>
</tr>
<tr>
<td>Highest GPA in Department of Economics, University of Cyprus</td>
<td>2014, 2015, 2016, 2017</td>
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SKILLS

<table>
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<tr>
<th>Computer Programming:</th>
<th>Stata, LATEX, Python, Julia</th>
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<tr>
<td>Languages:</td>
<td>English, Greek</td>
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Evaluation of Higher Rental Subsidies and Their Impact on Wealthy Neighborhoods  
(Job Market Paper)

The Department of Housing and Urban Development (HUD) defined the maximum rent subsidy for its largest rental assistance program at the broad geographical area. These subsidies have led to a disproportional share of assistance recipients to reside in the poor neighborhoods of each area where low rent units are located. In 2018, HUD introduced zip-code-level maximum subsidies to 24 qualifying areas. This paper employs the policy induced abrupt change in a neighborhood’s rental stock that can be subsidized along with a comparable control group in a novel triple difference design. This design is utilized to identify the policy’s causal effect on assistance recipients’ neighborhood choice and whether it has induced an adverse effect on housing appreciation rates at the neighborhood level. The results show a moderate response in their neighborhood choice...
along with considerable heterogeneity across geographical areas. Event study analysis suggests this effect takes place only after implementation and attenuates after 3 years. In addition, this paper finds no effect on average neighborhood appreciation rates. Finally, synthetic control methods confirm the conclusions and further suggest the policy reform would be equally effective in areas not implemented.

Local Labor Market Composition Changes and Their Effect on Major Choice

This paper seeks to give a better understanding about the relationship between the major choice process and the labor market structure by examining the responsiveness of major specific completions to the share of the local labor market that is comprised by the graduates of a given major. The dynamic effect is identified by exploiting quasi-random variation that is constructed using shift-share instruments which leverage both changes in the occupational composition and the composition of majors within occupations at the national level. Data on major completions for the time period of 2009–2018 are obtained from the Integrated Post-secondary Education Data System (IPEDS) of the National Center for Education Statistics (NCES) whereas the major shares of the local labor markets are constructed using the American Community Survey (ACS) for the same time period. The results of the estimation show that students are indeed responsive to changes in the local labor market with the period between freshman and sophomore years having the biggest effect. A decomposition of the effect shows that most of the effect is comprised of an over-response to the changing occupational composition and a moderate response to changes coming from the major composition within occupations.

Occupational Sorting with Heterogeneous Employer Learning Rates

The employer learning process is an important aspect of wage dynamics and is more pronounced at the beginning of one’s career. Due to asymmetric information, individuals who are more (less) productive than what their observables reveal, will be underpaid (overpaid) at the beginning of their careers. In this paper, I develop a two-period, two-occupation model which analyzes the occupational decisions in an asymmetric information game where workers differ on whether their productivity was underestimated or overestimated, which is called productivity assessment error, and occupations are heterogeneous with respect to the extent at which output is associated with a worker’s productivity assessment error, which is argued to be correlated with the employer learning rates. Two predictions are derived from the model. First, workers with positive (negative) productivity assessment errors are more likely to sort into occupations where employer learning is faster (slower), and second, the incentives to sort in this manner are diminishing with experience. I use data from the National Longitudinal Survey of Youth 1979 (NLSY79) and Current Population Survey (CPS) Merged Outgoing Rotation Group (MORG) to directly test these two predictions separately for workers who have less than college degree education and for college graduates. The
Lorenz K.F. Ekerdt
Department of Economics, University of Rochester, Rochester NY 14627
☎ +1-973-970-0071  |  lekerdt@ur.rochester.edu  |  http://sites.google.com/view/lorenz-ekerdt

Education

University of Rochester
PHD Economics (ANTICIPATED) 2023

London School of Economics and Political Science
MSc Economics 2017

Vassar College
BA Economics, BA Biology 2015

Awards, Fellowships, & Grants

Tapan Mitra Prize for Best Fifth-Year Empirical Paper
UNIVERSITY OF ROCHESTER 2022

NSF Doctoral Dissertation Improvement Grant
NATIONAL SCIENCE FOUNDATION 2020

Conibear Memorial Prize for Best Third-Year Paper
UNIVERSITY OF ROCHESTER 2020

Graduate Fellowship and Tuition Scholarship
UNIVERSITY OF ROCHESTER 2017-2022

Presentations

Research Data Center Annual Conference
FEDERAL RESERVE BANK OF KANSAS CITY Fall 2022

Midwest Macroeconomics Conference
SOUTHERN METHODIST UNIVERSITY Fall 2022

Economics Graduate Student Conference
WASHINGTON UNIVERSITY OF ST. LOUIS Fall 2022

Teaching Experience

Teaching Assistant
ECO208 INTERMEDIATE MACROECONOMICS 2022-2021

Teaching Assistant
ECO209 INTERMEDIATE MICROECONOMICS 2021-2020

Teaching Assistant
ECO289 RESEARCH AND COMMUNICATION 2020

Professional Experience

Research Assistant
PROFESSOR MARK BILS 2022
Research Assistant
PROFESSOR YENA PARK

References

Professor Mark Bils (advisor)
Department of Economics, University of Rochester, Rochester, NY 14627
 +1 (585) 738-8859
 mark.bils@rochester.edu

Professor George Alessandria
Department of Economics, University of Rochester, Rochester, NY 14627
 +1 (585) 275-3096
 george.alessandria@rochester.edu

Professor Yan Bai
Department of Economics, University of Rochester, Rochester, NY 14627
 +1 (585) 275-4196
 yan.bai@rochester.edu

Other

CITIZENSHIP
U.S.A., Germany

LANGUAGES
German, fluent
French, conversational

SOFTWARE
Stata, Matlab, Python, Fortran

Research

JOB MARKET PAPER
Demand for Quality and the Rise of Specialized Firms (with Kai-Jie Wu)
This paper studies firm diversification over 6-digit NAICS industries in U.S. manufacturing. We find that firms specializing in fewer industries now account for a substantially greater share of production than 40 years ago. This reallocation reflects the faster growth of specialized firms rather than large firms specializing. As a result, more specialized firms have increased their presence among industry leaders and have thus become a key determinant of industry concentration. We hypothesize a positive relation between specialization and product quality, and we support this view by showing that specialized firms tend to charge higher unit prices and are more insulated against Chinese import competition. Incorporating our empirical findings, we propose a theory that provides a new view on rising industry concentration: because quality is a luxury, this trend can be a natural outcome of growth shifting demand toward higher-quality products.

WORKING PAPERS
Self-Selection and the Diminishing Returns to Research (with Kai-Jie Wu)
The downward historical trend of research productivity has been used to suggest that there are severe permanent diminishing returns of knowledge production. We argue that a substantial portion of the declining research productivity is a transitional phenomenon caused by self-selection in researchers’ ability and the expansion of the research sector. To quantify these short-run diminishing returns, we develop a model of self-selected researcher supply and estimate it using data on the labor share and earning distribution of researchers. We then use our result to revisit the estimation of the knowledge production function and its resulting prediction on long-run economic growth. We find that switching from an accounting framework without considering self-selection to one with doubles the long-run growth rate of per capita income predicted by semi-endogenous growth models.
Naoki Fujiwara

PERSONAL DETAILS

Department of Economics, University of Rochester, Rochester NY 14627
Phone +1 (585) 743-8321
Mail nfujiwar@ur.rochester.edu
Website https://sites.google.com/view/naoki-fujiwara
Citizenship Japan (F1 Visa)

EDUCATION

Ph.D. in Economics, 2023 (expected)
University of Rochester, Rochester, New York

M.A. in Economics, 2019
University of Rochester, Rochester, New York

Exchange Student, 2014-2015
Department of Mathematics, University of California, Irvine, California

B.A. in Pure Mathematics, 2016
Waseda University, Tokyo, Japan

RESEARCH FIELDS

Economic Theory, Political Economy, Formal Political Theory

WORKING PAPERS

Low Prices and Resale Markets (Job Market Paper, with Marton Szabo)
Quality and Price in Scoring Auctions (with Yu Awaya and Marton Szabo)

WORK IN PROGRESS

Cheap-talk in Crisis Bargaining Games (with Mark Fey and Marton Szabo)
Signaling Weakness through One-time Advantages (with Marton Szabo)
Radical Announcements in Elections (with Alexander Lee and Marton Szabo)
Resource Allocation as an Incentive to Fight (with Marton Szabo)
Allocating a Divisible Good to Agents with Single-Plateau Preferences (with Norikazu Hirose)
PUBLICATIONS


TEACHING EXPERIENCE

Lecturer for ECON 101 Introduction to Microeconomics, Rochester Education Justice Initiative (through University of Rochester), 2022 Spring

Lecturer for ECON 288 Game Theory, University of Rochester, 2021 Summer

Teaching Assistant for ECON 472.1 Modern Value Theory (Graduate Game Theory), 2021 Spring (Professor Paulo Barelli)

Teaching Assistant for ECON 288W Game Theory, 2020 Fall (Professor Paulo Barelli)

Teaching Assistant for ECON 108 Principles of Economics, 2020 Spring (Professor Steven Landsburg)

Teaching Assistant for ECON 207 Intermediate Microeconomics, 2019 Fall (Professor Steven Landsburg)

WORK EXPERIENCE

Research Assistant for Yu Awaya, 2022

Research Assistant for Mark Fey, Summer 2019, Summer 2021 and Summer 2022

English and Math Instructor at JPREP TOKYO, 2015 September-2017 July

Creating materials and teaching math and English to high school students in Tokyo

Research Assistant for Jeffrey A. Barrett (UC Irvine), July 2015-August 2015

ACADEMIC HONORS AND AWARDS

- Program in Empirical Policy Research (PEPR) Fellowship of the Wallis Institute January 2021-May 2021
- Wallis Institute Fellowship, University of Rochester, 2020-2021
- Graduate Fellowship and Tuition Fellowship, University of Rochester, 2017-2022
- The Nakajima Foundation Fellowship
- Dean’s Honor List at UC Irvine (Fall, Winter and Spring Quarter)
- A Scholarship for Exchange Study from Waseda Supporter’s Club, 2014
SKILLS

Languages: Japanese (native), English (fluent)
Software: Python, LaTeX, Stata, Matlab, Mathematica, R, C

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 Mark Fey
Department of Political Science
University of Rochester
Rochester, NY 14627 USA
Phone: +1 (585) 275-5810
E-mail: mark.fey@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
Abstracts

September 30, 2022

1 Low Prices and Resale Markets (Job Market Paper, with Marton Szabo)

We explain the phenomenon of low ticket prices in primary markets when resale opportunities exist. We compare the primary market price under two different market structures, one with the possibility of resale and one without. The existence of a resale market ensures a higher revenue for the seller since the potential profits from the secondary market attract lower valuation buyers as well. Our main result is that for a class of left-skewed buyer valuation distributions, the seller charges a lower primary market price when resale is possible. This occurs since an increase in the primary market price generally deters more buyers in the resale case compared to the no-resale case. The low primary market price leads to a high chance of resale.

2 Quality and Price in Scoring Auctions (with Yu Awaya and Marton Szabo)

These days many governments employ scoring auctions—an auction format where bidders submit a pair of price and quality. Its goal is to achieve a high-quality procurement, even at the expense of a higher price. In this paper, we theoretically confirm this trade-off. We compare scoring auctions to more traditional auctions where the auctioneer first chooses a quality optimally, and then bidders submit prices. Our main result identifies conditions for which scoring auctions yield higher quality but at a higher price.
3 Cheap-talk in Crisis Bargaining Games (with Mark Fey and Marton Szabo)

Our paper investigates the role of costless communication (cheap-talk diplomacy) in crisis bargaining games with incomplete information. In these games, countries send cheap-talk messages before the bargaining stage where the failure to reach a settlement leads to war. Ramsay (2011) showed the existence of an influential cheap-talk equilibrium in a Nash-demand game with strategies that do not survive the iterative elimination of weakly dominated strategies (IEWDS). Our paper shows that under the same bargaining structure, a different type of influential cheap-talk still emerges even if we require strategies to survive IEWDS. We also find that the Ramsay (2011) type influential cheap-talk equilibrium is only possible if an intuitive condition is violated. To compare the effect of bargaining power on the possibility of influential cheap-talk, we also analyze the ultimatum game with two-sided incomplete information and show that with a refinement on off-path beliefs, influential cheap-talk is impossible.

4 Signaling Weakness through One-time Advantages (with Marton Szabo)

Our paper explains why tactics providing short-term advantages (such as surprise attacks) are usually employed in a war by weaker sides, not by stronger sides. We model the ongoing conflict between states by a multi-stage war of attrition game with private information about military power. The countries can use the short-term advantage once to boost their military power for one period anytime during the conflict. We characterize an equilibrium where the weak type uses this advantage first, while the strong type withholds and only employs it in a later stage if the conflict does not conclude. The weaker type uses this one-time advantage hoping that it will lead to a victory. On the other hand, the strong type forgoes the advantage initially to force a concession and spare the next period’s cost of war. One novelty of our model is that, unlike in traditional signaling models, the weak side undertakes an action that signals weakness but can lead to a decisive victory.
Jeremy Kettering

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

Phone: +1 (319)-329-9789
E-mail: jketteri@ur.rochester.edu
Website: https://sites.google.com/view/j-kettering/home
Citizenship: US

Education

Ph.D. in Economics, University of Rochester, 2023 (expected).
M.S. in Mathematics, Western Illinois University, 2016.
B.B.A. in Finance, University of Iowa, 2011.

Research Fields

Microeconomic Theory, Game Theory, Financial Economics, Decision Theory

Publications


Working Papers

• “Large Shocks and Uncertainty in Beauty Contests” Job Market Paper
• “Sequential Trading with Coarse Contingencies” (with Sarah Auster and Asen Kochov)

Conference Presentations

Risk, Uncertainty and Decision 2020. GAMES 2021

Teaching Experience

Instructor, Economics Department, University of Rochester
• Intermediate Microeconomics, Summer 2020

Teaching Assistant, Economics Department, University of Rochester
• Modern Value Theory I (Graduate), Fall 2019 and 2020 (Professors Kochov and Awaya)
• Intermediate Microeconomics, Fall 2018 (Professor Landsburg), Spring 2020 (Professor Awaya)
• Principles of Economics, Spring 2019 (Professor Landsburg)
• Financial Crisis: Theory and Evidence, Spring 2021 (Professor Kochov)
• Behavioral Economics, Fall 2021 (Professor Kochov)

Instructor, Mathematics Department, Western Illinois University
• Intermediate Algebra, Fall 2015, Spring 2016

References

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

Professor Asen Kochov (Co-Advisor)
Department of Economics
University of Rochester
Rochester, NY 14627, USA.
Phone: +1 (585) 275-4243
E-mail: asen.kochov@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
Large Shocks and Uncertainty in Beauty Contests

Jeremy Kettering
University of Rochester

Job Market Paper

Large economic downturns are frequently accompanied by increases in levels of uncertainty. This paper provides an explanation for how news of large economic events can endogenously generate increases in strategic uncertainty, or uncertainty of the actions of others in the economy. I introduce heterogeneity in default actions and adjustment costs to the canonical beauty contest model. The main finding of this paper is that after news of a large shock, a larger proportion of the population will adjust their actions, increasing the uncertainty of individual actions and aggregate variables in the economy. In addition, the larger the fraction of agents who are adjusting their actions at a given moment, the stronger the effective coordination motive of these agents. Thus, agents are more concerned with public signals, relative to private signals, during large shocks.

Sequential Trading with Coarse Contingencies

with Sarah Auster and Asen Kochov

We consider a dynamic pure exchange economy in which agents have a coarse perception of the future and, in particular, may be unaware of some risks. As awareness of these risks emerges, markets have to re-open to allow the agents to re-optimize and purchase insurance. The paper provides an irrelevance theorem, showing that if unforeseen shocks are purely idiosyncratic and agents become aware of them before they occur, then unawareness does not affect equilibrium consumption. Unawareness thus matters only if it concerns aggregate shocks. Building on this insight, we highlight several interesting implications for economies with unforeseen aggregate shocks: the agents’ failure to spread the cost of insurance efficiently across time, heterogeneous consumption growth rates, systematically biased price expectations and the possibility of unexpected default.

Consumption Smoothing and Discounting in Infinite-Horizon, Discrete-Choice Problems

with Asen Kochov

Suppose the consumption space is discrete. Our first contribution is a technical result showing that any continuous utility function of any stationary preference relation over infinite consumption streams has convex range, provided that the agent is sufficiently patient. Putting the result to use, we consider a model of endogenous discounting (a generalization of the standard model with geometric discounting) and show the uniqueness of the consumption-dependent discount factor as well as the cardinal uniqueness of utility. Comparative statics are then provided to substantiate the uniqueness. For instance, we show that, as in the more familiar case of an infinitely divisible good, the cardinal uniqueness of utility captures an agent’s desire to smooth consumption over time.
Armen Khederlarian

Department of Agricultural and Resource Economics
University of Connecticut
1376 Storrs Road, Unit 4021, WB Young 315
Storrs, CT 06269-4021

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

Professional Experience
Postdoctoral Fellow in International Economics and Data Science, University of Connecticut 2021-23.

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

Research Fields
International Trade, International Macroeconomics & Development

Publications
“How Does Trade Respond to Anticipated Tariff Changes? Evidence from NAFTA”, with Khan, 2021 *Journal of International Economics, 133*

“The Aggregate Effects of Global and Local Supply Chain Bottlenecks: 2020–2022”, with Alessandria, Khan, Mix and Ruhl, 2022. Accepted at special issue of *JIE* (NBER ISOM)

Working Papers
“Inventories, Input Costs and Productivity Gains from Trade Liberalizations”, with Khan *under review*

“Taking Stock of Trade Policy Uncertainty: Evidence from China’s Pre-WTO Accession”, with Alessandria and Khan *under review*

“Trade Policy Dynamics: Evidence from 60 Years of U.S.-China Trade”, with Alessandria, Khan, Ruhl and Steinberg, *under review*

“Pre-Trends and Trade Effects of Temporary Trade Barriers”, with Steinbach, *under review*

Work In Progress
“Supply Chain Recessions”, with Alessandria, Khan, Mix and Ruhl

“Dynamic Trade Elasticities”, with Alessandria, Khan, Ruhl and Steinberg
“The Trade Effects of Temporary Trade Barriers using Synthetic Controls”,
with Steinbach

“Aggregate Gains from Trade Liberalization: Inventory Management Efficiency”,
with Alessandria and Khan

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

**Conference & Seminar Presentations**

2022 SEA Annual Meeting, University of Rochester, Midwest International Trade Meeting (Purdue), Armenian Economic Association Monthly Seminars.


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**

*Guest Lecturer, University of Connecticut*

International Trade and Policy (BS, MS), Fall 2022

*Instructor, University of Rochester*

Intermediate Macroeconomics (BS), Spring 2020
Intermediate Microeconomics (BS), Summer 2019

*Teaching Assistant, University of Rochester*

Industrial Organization (BS), Spring 2019
International Trade (BS), Spring 2018
Macroeconomics (PhD), Fall 2017

**Grants, Fellowships, Scholarships and Awards**

2022-23 Foreign Agricultural Service, United States Department of Agriculture, Cooperative Agreement: “The Russia-Ukraine War and Global Trade Reallocations: Opportunities or Impairments for U.S. Agriculture?,” with Sandro Steinbach, Md Deluair Hossen, and Andrew Muhammad, Co-Investigator (USD 75,000)

2021-23 National Institute of Food and Agriculture, AFRI Program: “The Impact of Trade Disputes on U.S. Agriculture: Data-Driven Approaches for Counterfactual Measurement,” with Sandro Steinbach, Colin A. Carter, Co-Investigator (USD 485,528)
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
2019  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

Referee Services

Others
Computer Skills: Stata, Matlab, Julia, Python, Latex
Languages: English (Fluent), German (Native), Spanish (Native), Catalan (Native), French

References

George Alessandria, Professor of Economics, University of Rochester
Dept. of Economics, 280 Hutchison Road, Rochester, NY 14620
Email: george.alessandria@gmail.com

Kim J. Ruhl, Professor of Economics, University of Wisconsin–Madison
Dept. of Economics, 7444 Social Sciences Bldg., Madison, WI 53706
Email: ruhl2@wisc.edu

Joseph B. Steinberg, Associate Professor, University of Toronto
Dept. of Economics, 150 St. George Street, Toronto, ON M5S 3G7
Email: joseph.steinberg@utoronto.ca

Sandro Steinbach, Assistant Professor, University of Connecticut
Agricultural and Resource Economics, 1376 Storrs Road Storrs, CT 06269
Email: sandro.steinbach@uconn.edu
Job Market Papers

1. Trade-Policy Dynamics: Evidence from 60 Years of U.S.-China Trade

Joint with Alessandria, Khan, Ruhl and Steinberg

We study the growth of Chinese exports to the United States, from autarky during 1950–1970 to 15 percent of overall U.S. imports in 2008, taking advantage of the rich heterogeneity in trade policy and trade growth across products during this period. Central to our analysis is an accounting for the dynamics of trade flows, observed trade policy, and expectations about future policy. In our empirical analysis, we estimate the dynamics of the elasticity of Chinese exports to (i) past tariff changes and (ii) the risk of future tariff hikes. We find Chinese exports responded slowly to the tariff changes that occurred when China was granted most-favored-nation status in 1980, and that policy uncertainty was more important in the immediate aftermath of this liberalization than in the lead-up to China’s 2001 accession to the World Trade Organization. However, separately identifying these two effects using data alone is difficult. In our quantitative analysis, we disentangle these effects by using a structural model to estimate a path of trade-policy expectations. We find the 1980 reform was largely a surprise and initially had a high probability of being reversed. The likelihood of reversal dropped considerably during the mid 1980s but changed little throughout the late 1990s and early 2000s despite China’s accession to the World Trade Organization in 2001.


Joint with Alessandria, Khan, Ruhl and Mix

We study the aggregate effects of supply chain disruptions in the post-Pandemic period in a two-country heterogeneous-firm general equilibrium model with a rich set of supply chain frictions: shipping delays, fixed order costs, storage costs, uncertain delivery, and uncertain demand. These frictions lead firms to hold inventories that depend on the source of supply and these inventories influence price setting and are an input into production. We model aggregate shocks that capture the dynamics of the global economy in the crisis and recovery. We show that increases in shipping times are contractionary, raise prices and increase stockouts, particularly for goods intensive in delayed inputs. These effects are larger when inventories are already at low levels, as in the U.S. and the world since early in the Pandemic.

Last updated: October 7, 2022
Kenwin Maung
280 Hutchison Road
University of Rochester, Rochester, NY
Tel: (585)-210-6219
LinkedIn: linkedin.com/in/kenwin
E-mail: gmaung@ur.rochester.edu
Website: kenwinmaung.com
Citizenship: Singapore

Education
Ph.D. in Economics, University of Rochester 2018 – 2023 (expected)
M.A. in Economics, University of Rochester 2020
B.A. in Global Political Economy, Waseda University 2014 – 2018

Research Fields
High-Dimensional Econometrics, Time Series, Financial Networks

Working Papers
(1) Large Network Autoregressions with Unknown Adjacency Matrix (Job market paper)

(2) Time-varying Forecast Combination for High-Dimensional Data (with Chen, B.).
   ▪ Revise and resubmit at Journal of Econometrics (2nd round).

(3) Estimating High-Dimensional Markov-Switching VARs.
   ▪ Best Ph.D. presentation at the 23rd Dynamic Econometrics conference; Under revision (rejct and resubmit at Journal of Econometrics).

Work in Progress
A Residual-based Test of Markov-Switching Cointegration: Pairs Trading with Regimes.
   ▪ Presented at 2021 Economics Graduate Student Conference at WUSTL.

Other Work (Public Health)
The Lancet Healthy Longevity (2021); Media coverage

PLoS Computational Biology (2021); Media coverage

Edited 9/25/2022
**Teaching Experience**

Instructor for Econometrics camp (Ph.D.) Summer 2021, 2022  
Instructor for Economic Statistics Summer 2021  
TA for Econometrics II (Ph.D.) Spring 2021 (4.94/5), 2022 (5/5)  
TA for Econometrics I (Ph.D.) Fall 2021 (5/5), 2022  
TA for Economic Statistics Fall 2020

*Teaching evaluation in parenthesis where available.

**Research Experience**

2019-2020 RA for Chen Bin, Department of Economics, University of Rochester.  
2018 RA for Cynthia Chen, Saw Swee Hock School of Public Health, National University of Singapore.  
2017-2018 RA for Fumio Hayashi, National Graduate Institute for Policy Studies.  

**Professional Affiliation and Services**

Member: Econometric Society, Society of Economic Measurement.  
Referee: PLOS ONE.

**Skills**

Programming: R (main), Python, Stata, MATLAB.  
Language: English (Native), Mandarin (Conversational), Japanese (Conversational).

**Awards and Fellowships**

PEPR Grant, Wallis Institute of Political Economy, University of Rochester, 2018  
Summer Research Grant, University of Rochester, 2018  
Graduate Fellowship and Tuition Scholarship, University of Rochester, 2018-present

**References**

<table>
<thead>
<tr>
<th>Bin Chen (Advisor)</th>
<th>Nese Yildiz</th>
<th>Michael Gofman</th>
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<tr>
<td>Department of Economics</td>
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<td>Simon Business School</td>
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<td>United states</td>
<td><a href="mailto:michael.gofman@simon.rochester.edu">michael.gofman@simon.rochester.edu</a></td>
</tr>
<tr>
<td><a href="mailto:binchen@rochester.edu">binchen@rochester.edu</a></td>
<td><a href="mailto:nese.yildiz@rochester.edu">nese.yildiz@rochester.edu</a></td>
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Abstracts

**Large Network Autoregressions with Unknown Adjacency Matrix**
*(Job market paper)*

Many spatial and network econometric models rely on known spatial weights. This becomes a problem for investigations where the adjacency matrices are not readily accessed or constructed such as those typically observed in financial networks. Furthermore, direct estimation may be cumbersome or infeasible if the number of units in the network is large. To deal with this, we propose a Structural Vector Autoregression (SVAR) data-driven approach to recover the network structure via matrix regression under a large N and T asymptotic framework. The high-dimensionality of the problem is dealt with by focusing on the hub and authority centralities of the network, which eigenvector centralities are a special case of. We show, both theoretically and through simulations, that the reduced-form estimator is consistent and asymptotically normal, and suggest an identification strategy for the SVAR as implied by its spatial structure. In an empirical application, we apply the proposed method to uncover the dynamic connectedness in the daily volatility of major sector Exchange Traded Funds (ETFs) prices. Using the estimated network structure, we produce out-of-sample forecasts and demonstrate that our model significantly out-performs other commonly used methods.

**Time-varying Forecast Combination for High-Dimensional Data**
*(with Chen B.)*

Revise and resubmit at Journal of Econometrics *(2nd Round)*

In this paper, we propose a new nonparametric estimator of time-varying forecast combination weights. When the number of individual forecasts is small, we study the asymptotic properties of the local linear estimator. When the number of candidate forecasts exceeds or diverges with the sample size, we consider penalized local linear estimation with the group SCAD penalty. We show that the estimator exhibits the oracle property and correctly selects relevant forecasts with probability approaching one. Simulations indicate that the proposed estimators outperform existing combination schemes when structural changes exist. An empirical application on inflation and unemployment forecasting highlights the merits of our approach relative to other popular methods in the literature.
Estimating High-Dimensional Markov-switching VARs
Under revision (reject and resubmit at Journal of Econometrics)

Maximum likelihood estimation of large Markov-switching vector autoregressions (MS-VARs) can be challenging or infeasible due to parameter proliferation. To accommodate situations where dimensionality may be of comparable order to or exceeds the sample size, we adopt a sparse framework and propose two penalized maximum likelihood estimators with either the Lasso or the smoothly clipped absolute deviation (SCAD) penalty. We show that both estimators are estimation consistent, while the SCAD estimator also selects relevant parameters with probability approaching one. A modified EM-algorithm is developed for the case of Gaussian errors and simulations show that the algorithm exhibits desirable finite sample performance. In an application to short-horizon return predictability in the US, we estimate a 15 variable 2-state MS-VAR(1) and obtain the often reported counter-cyclicality in predictability. The variable selection property of our estimators helps to identify predictors that contribute strongly to predictability during economic contractions but are otherwise irrelevant in expansions. Furthermore, out-of-sample analyses indicate that large MS-VARs can significantly outperform "hard-to-beat" predictors like the historical average.

A Residual-based Test of Markov-Switching Cointegration: Pairs Trading with Regimes.

Pairs traders generate excess returns by capitalizing on the mispricing of a stock relative to another, for which an equilibrium relationship between them is known to exist. Cointegration is a natural framework to study the mean-reverting spreads of these stocks. Due to idiosyncratic shocks however, it is possible that the cointegrating relationship breaks down or changes, leading to regime-switching behavior in the spread. We conduct simulations and an empirical application to show that it is sub-optimal to ignore such dynamics and to trade with agnostic rules. To identify such situations, we propose a locally optimal residual-based test of Markov-switching cointegration, together with a finite-sample correction for power using the Cochrane-Orcutt procedure. We derive the asymptotic null distribution of the test statistic and show that a bootstrap-based inference is valid. Applying our test to the US stock market indicates that roughly 10% of within-industry pairs exhibit Markov-switching cointegration, which suggests that the scenario is not uncommon.
Alexis Orellana

Wheelock College of Education & Human Development  
Boston University  
Two Silber Way  
Boston, MA 02215

✉ borellan@bu.edu  
📞 (+1) 585-309-8075  
🌐 http://alexisorellana.github.io

Appointments

Boston University
- Postdoctoral Associate, Wheelock College of Education and Human Development  
  2021-present

Education

University of Rochester
- Ph.D. in Economics  
  2021
- M.A. in Economics  
  2017

University of Chile
- M.Sc. in Applied Economics (highest honors)  
  2013
- B.Sc. in Electrical Engineering (highest honors)  
  2010

Research Interests

Labor Economics, Economics of Education, Applied Microeconomics

Working Papers

“Neighbors’ Effects on High School Choice” (with Juan Matta)  
(Job Market Paper)

“Teacher Mis-assessments and High School Outcomes: Heterogeneous Effects by Race and Gender”  
(Under Review)

“COVID-19 and the Composition of the Massachusetts Teacher Workforce”  
(with Andrew Bacher-Hicks and Olivia Chi)  
(Conditionally accepted at Educational Researcher)

“Aspirations, Education, and Occupations” (with Kegon Tan)

Work in Progress

“Coworker Networks, Residential Neighbors, and Earnings Growth”

“College Major Choice and Labor Market Matching” (with Ronni Pavan and Joshua Kinsler)

“Licensure Tests and the Supply of Teachers” (with Marcus Winters)

Seminars and Conferences

2022: AEFP, SOLE, Boston University (Wheelock), Boston University (Applied Micro Workshop)

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, Labor Economics, Statistics, Marketing Research and Analytics
· Graduate: Econometrics, Research in Applied Econometrics, Core Statistics, Economics and Marketing Strategy, Consumer and Brand Research, Managerial Economics

Teaching Assistant, University of Chile
· Undergraduate: Principles of Economics, Intermediate Microeconomics
· Graduate: Economic Policy Workshop, Econometrics

Other Employment
University of Rochester
Research Assistant for professors Ronni Pavan, Kegon Tan, and John Singleton
Fiscalía Nacional Económica (Chilean Antitrust Agency)
Economist, Cartels Unit and Regulated Markets Unit

Fellowships, Scholarships and Honors
Thomas B. Fordham Institute and American Enterprise Institute
Emerging Education Policy Scholar.
W.E. Upjohn Institute for Employment Research
Early Career Research Award.
University of Rochester
Program in Empirical Policy Research (PEPR) Grant.
W. Allen Wallis Institute of Political Economy.
University of Rochester
Summer research grant (x2).
University of Rochester
Fellowship and tuition scholarship. Department of Economics.
Conicyt (Scientific Chilean Council)
Scholarship for master’s degree studies in Chile.
University of Chile
Honor List. Electrical Engineering Department, Faculty of Physical and Mathematical Sciences.
University of Chile
Scholarship for undergraduate studies based on academic excellence and socioeconomic background.

Other Activities
University of Chicago
Summer School on Socioeconomic Inequality (SSSI)
Professional Activities
Referee for *Journal of Human Resources*

Other
Languages: Spanish (native), English (fluent)
Computer Skills: Stata, Matlab, C, Fortran

Personal Information
Date of birth: June, 1986
Nationality: Chilean

References
Prof. Marcus Winters
Wheelock College of Education & Human Development
Boston University
Boston, MA 02215
✉ marcusw@bu.edu

Prof. Joshua Goodman
Wheelock College of Education & Human Development
Boston University
Boston, MA 02215
✉ edejosh@bu.edu

Prof. Ronni Pavan
Department of Economics
University of Rochester
Rochester, NY 14657
✉ ronni.pavan@rochester.edu

Last Updated: October, 2022
Neighbors’ Spillovers on High School Choice

(Joint with Juan Matta)

Do neighbors affect each others’ schooling choices? We exploit oversubscription lotteries in Chile’s centralized school admission system to identify the effect of close neighbors on application and enrollment decisions. A student is 6-8% more likely to rank a high school as first preference and to attend that school if the closest neighbor attended it the prior year. These effects are stronger in families with lower education, college expectations, and prior academic achievement, measured by previous scores in national standardized tests. Lower-achieving applicants are more likely to follow neighbors to schools with better attributes when their closest neighbor’s test scores are higher. Targeted policies aimed at increasing information to disadvantaged parents could produce significant multiplier effects.

Neighbors, Coworkers, and Earnings Growth

I study the relevance of former coworkers and neighbors to explain job mobility and earnings growth patterns for workers in the United States. Using matched employer-employee data from the Longitudinal Employer-Household Dynamics I construct individual-level proxies of new job opportunities available to workers using the number of new hires in firms where previous coworkers and close neighbors work. I propose an empirical framework to isolate the effect of individual-level networks from other determinants of job mobility. I merge these records to multiple rounds of the American Community Survey to investigate heterogeneity across occupations and college majors.

Aspirations, Education, and Occupations

(Joint with Kegon Tan)

It is well documented that children often “inherit” their parents’ occupations. This paper studies the role of early occupational aspirations in determining later life outcomes, a potentially important channel for intergenerational correlations in occupations. Using the Wisconsin Longitudinal Study, we estimate a lifecycle model of college choice and occupation choice to quantify the effect of aspirations on education and wages. We find that aspirations have a sizeable impact on educational attainment and wages, even conditional on latent skills that we recover from the choice model. We also simulate the importance of family background conditional on skills through the strong correlation between family background and aspirations. Our findings suggest that aspirations may be valuable for reducing intergenerational inequality.
Education

Ph.D. Candidate in Economics, University of Rochester, USA, 2023 (expected).
M.A. in Economics, Yonsei University, South Korea, 2018.
B.A. in Applied Statistics, Yonsei University, South Korea, 2014.

Research Fields

Technological Change, Labor Economics, Public Economics, and Urban Economics.

Working Papers

• “Investment Stimulus, Automation and Skill Demand” (Job Market Paper)
• “Racial and Ethnic Inequality and the China Shock,” joint with Lisa Kahn and Lindsay Oldenski
• “High-Tech Clusters, Labor Demand and Inequality: Evidence from Online Job Postings in China,” joint with Qin Chen, Klint Mane and Ande Shen

Work in Progress

• “Heterogeneity in Return to College across Fields of Study”, joint with Ronni Pavan
• “Labor Mobility, Land-Use Policies and Urban Dynamics”, joint with Ande Shen
• “Job Polarization and Wage Premiums for STEM Majors”

Publications

Teaching Experience
Teaching Assistant, Economics Department, University of Rochester
Econometrics (Undergraduate), Fall 2020, Spring 2021, Fall 2021, Spring 2022, Fall 2022
(Professor Ronni Pavan, and Kegon Tan)

Teaching Assistant, Economics Department, Yonsei University
Topics in Macroeconomics (Graduate), Spring 2018 (Professor Yongsung Chang)

Fellowships, Scholarships, and Grants
Graduate Fellowship and Tuition Scholarship, University of Rochester, 2018-2023
Conference Travel Award, University of Rochester, 2022
Korean Rochester Economics Alumni Fellowship, University of Rochester, 2022
W. Allen Wallis Fellowship, W. Allen Wallis Institute, 2020-2021
Program in Empirical Policy Research Grant, W. Allen Wallis Institute, 2020, 2022
Summer Research Grant, University of Rochester, 2020
River Campus Library Data Grant, University of Rochester, 2020, 2022
Scholarship for the Best Research Proposal, Yonsei University, 2017
Yonsei Economics Scholarship, Yonsei University, 2017
Brain Korea 21 Plus Incentive Scholarship, Yonsei University, 2016

Conference Presentations


Others
Languages: Korean (native), English (fluent), Chinese (basic)
Computer Skills: Stata, Python, QGIS, Julia, and Matlab
Staff Sergeant, Republic of Korea Air Force, 2014 - 2016
References

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

Professor John Singleton
Department of Economics
University of Rochester
Rochester, NY 14627, USA.
Phone: +1 (585)-275-7214
E-mail: john.singleton@rochester.edu
**Investment Stimulus, Automation, and Skill Demand**  
*(Job Market Paper)*

This paper studies how firm-level investment and labor demand respond to a reduction in capital cost in the automation process. Using the bonus depreciation policy in the recent U.S. tax reform as an exogenous variation in capital cost, we find that the policy-driven reduction in capital cost lowers labor demand while increasing investment. The positive policy effect on investment is observed only for the eligible capital: machinery and equipment. Using detailed firm-level information on skill and patent compositions, we also find that the reduction in labor demand concentrates in job positions with few software skills and firms with high automation-related technologies, supporting the displacement effect of automation. We illuminate the mechanisms and welfare implications behind the empirical results by introducing a model of automation based on the task-based framework. Linking the reduced-form estimates and the model, we recover capital-labor substitution elasticity by skill and technology levels and find that the task displacement effect of automation accounts for the parameter's heterogeneity. Our results support the public concern that automated capital could replace some types of workers and show that investment stimulus for machinery and equipment accelerates automation.

**Racial and Ethnic Inequality and the China Shock**  
*(with Lisa Kahn and Lindsay Oldensi)*

This paper examines how the labor market effects of import competition vary across Black, Hispanic, and white populations. For a given level of exposure to imports from China, we find no evidence that minority workers are relatively more harmed than white workers in terms of their manufacturing employment. However, exposure to trade shocks varies greatly across groups. Black workers are less likely to live in areas or work in industries facing import competition, resulting in less negative effects of the China shock on manufacturing employment relative to whites. Black workers also benefit disproportionately from the shift towards non-manufacturing employment resulting from the China shock, partially due to their overrepresentation in services. In contrast, Hispanic workers are overrepresented in exposed industries, though not in exposed geographic areas, meaning that on net they face greater manufacturing employment losses relative to whites. In addition, they do not experience the same relative gains in non-manufacturing employment as Black workers, largely due to their lower educational attainment and initial industry employment. Overall, the China shock increased the Hispanic-white employment gap by about 5%, offsetting some of the recent gains in Hispanic relative to white employment rates. However, the China shock also
narrowed the Black-white employment gap by about 15%. While many labor market trends in recent decades have served to exacerbate Black-white gaps, import competition is a modest offsetting force.

**Self Interest in Public Service: Evidence from School Board Elections**
*(with Stephen B. Billings, Hugh Macartney and John D. Singleton)*

In this paper, we show that the election of a new school board member causes home values in their neighborhood to rise. This increase is identified using narrowly-decided contests and is driven by non-Democratic members, whose neighborhoods appreciate about 4% on average relative to those of losing candidates. We find that student test scores in the neighborhood public schools of non-Democratic winners also relatively increase, but this effect is driven by changing student composition, including via the manipulation of attendance zones, rather than improvements in school quality (as measured by test score value-added). Notably, we detect no differential changes when comparing neighborhood or scholastic outcomes between winning and losing Democratic school board candidates. These results suggest that partisan affiliation is correlated with private motivations for seeking public office.

**High-Tech Clusters, Labor Demand and Inequality: Evidence from Online Job Postings in China**
*(with Qin Chen, Klint Mane and Ande Shen)*

This paper evaluates the impact of high-tech clusters on inequality by focusing on a Chinese placed-based industrial policy called “Made in China 2025.” Exploiting the staggered roll-out of the policy across “pilot” cities and the representative online job posting data, we conduct an event-study analysis to investigate the effects of high-tech clusters on labor demand, wages, and living costs across occupations and regions. We find that the pilot cities experience a significant increase in online job vacancies and offered wages relative to non-pilot cities. At the same time, the wage gap between non-routine and routine occupations widens. On the contrary, this policy lowers labor demand and wages in neighboring areas of the pilot cities. Combining the labor market effects with increasing living costs in the pilot cities, we demonstrate that the welfare of non-routine job workers and workers in the neighboring areas disproportionately declines with the construction of high-tech clusters. Our results suggest that policymakers should be cautious about occupational and regional inequalities when constructing high-tech clusters.
Xiaomei Sui

Department of Economics       Phone: +1 (585) 319 62 21
University of Rochester       E-mail: xiaomeisui@rochester.edu
Harkness Hall                  Homepage: https://www.xiaomeisui.com/
Rochester, NY 14627, USA       Citizenship: P.R.China (F1 Visa)

Education

Ph.D. in Economics, University of Rochester, USA, 2017-2023 (expected)
B.A. in Economics, Renmin University of China, China, 2017

Research Fields

International Economics, Macroeconomics, Economic Growth and Development

Research Papers

Working Papers

• “Uneven Firm Growth in a Globalized World” (Job Market Paper)
  Best Paper Award for Ph.D. Students, Australasia Meeting of the Econometric Society, 2022
  Runner-up for Best Student Paper, Chinese Economist Society Annual Conference, 2022

• “Financial Development, Firm Growth, and Aggregate Productivity Divergence in Europe”

• “Incomplete Tariff Pass-through at the Firm Level: Evidence from U.S.-China Trade Dispute”, with Chengyuan He, Chang Liu, and Soo Kyung Woo

Work in Progress

• “Conglomerate Market Power”, with Min Fang and Tianchen Song

Research Presentations (* scheduled)

Seminars and Conferences
2022: Applied Young Economist Webinar*; Young Economist Symposium (Yale); RES Annual Symposium of Junior Researchers; Midwest Macroeconomics Conference (USU, SMU*); Midwest International Trade Conference (Purdue, Notre Dame*); Student Workshop on Entrepreneurial Finance and Innovation (SEFI); ES Australasia Meeting; ES Africa Meeting; CES NA Conference; the 4th International Conference on European Studies; CMiD (NUS); CompNet Annual Conference & EIB-ENRI; INFER 24th Annual Conference; China International Conference in Finance; AsianFA Annual Conference (HK PolyU)

2021: Economics Graduate Student Conference (WUSTL); North East Universities Development Consortium (Boston U); Comparative Analysis of Enterprise Data Conference; ES European Winter Meeting; ES Latin American Meeting; Bolivian Conference on Development Economics; INFER 23rd Annual Conference; EconTR2021 3rd International Conference on Economics

2020: Economics Graduate Student Conference (WUSTL)

Discussions


Teaching Experience

Teaching Assistant, Department of Economics, University of Rochester
   Economics of Globalization (Undergraduate) – Professor Gaston Chaumont (Fall 2020, 2021)
   Intermediate Macroeconomics (Undergraduate) – Professor Hamid Firooz (Spring 2021)
   Intermediate Macroeconomics (Undergraduate) – Armen Khederlarian (Spring 2020)
   Intermediate Microeconomics (Undergraduate) – Professor Steven Landsburg (Fall 2019)

Teaching Assistant, Simon Business School, University of Rochester
   Economics & Marketing Strategy (Master) – Professor Paul Nelson (Fall 2020, 2019)
   Core Statistics Using R (Master) – Professor Hana Choi (Summer 2019)

Fellowships, Scholarships, and Awards

Best Paper Award for Ph.D. Students, Australasia Meeting of the Econometric Society, 2022
Runner-up for Best Student Paper, Chinese Economist Society Conference, 2022
Professor Walter Oi Scholarship Fund in Economics, University of Rochester, 2021-2022
Data Research Grant, Department of Economics, University of Rochester, 2021-2022
Graduate Fellowship and Tuition Scholarship, University of Rochester, 2017-2022
Outstanding Undergraduate Award, Renmin University of China, 2017
National Scholarship, Renmin University of China (3 times), 2014-2017

Others

Special Sworn Status (SSS) Researcher, U.S. Census Bureau (2022-present)
Languages: English (fluent), Chinese (native)
Computer Skills: Julia, Matlab, Stata, Python, R, Latex

References

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

**Professor George Alessandria**
Department of Economics
University of Rochester
Rochester, NY 14627, USA.
Phone: (+1) 585-275-3096
E-mail: george.alessandria@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
Selected Abstracts

Uneven Firm Growth in a Globalized World

*(Job Market Paper)*

I study how globalization contributes to uneven firm growth and its implications for industrial concentration and productivity growth in advanced countries. I first provide new facts documenting divergences in sales, productivity, and patenting between industry leaders and followers, particularly in industries with increasing export intensities. Foreign rather than domestic markets mainly drive sales divergence. To rationalize these facts, I develop a two-country endogenous growth model with strategic domestic and international competition. Firms make innovation investments to increase domestic and foreign sales. Globalization, modelled as increasing international knowledge spillovers and decreasing trade iceberg costs, alters firms’ innovation incentives via growing market sizes and greater foreign competition. The market size effect triggers a stronger innovation response among leaders than followers, inducing an increase in domestic concentration that depresses firms’ innovation incentives via weaker domestic competition. The harsher foreign competition also reduces innovation incentives via profit loss. In the calibrated model, globalization explains 80% of the rise in industrial concentration and 50% of the productivity growth slowdown in the data, mainly due to weaker domestic competition. The increasing international knowledge spillover force of globalization dominates.

Financial Development, Firm Growth, and Aggregate Productivity Divergence in Europe

*(Third Year Paper)*

Since the information and communications technology revolution, productivity growth in Southern European countries has been substantially lower than in developed European countries. I document that Southern European firms have lower productivity growth, lower intangible capital growth, and lower leverage than developed European firms. The disparity is larger among smaller firms. To rationalize these findings, I build a model featuring endogenous firm productivity growth through innovation investment and size-dependent financial frictions. Financial frictions lower productivity growth via two channels: innovation investment and misallocation. The model finds that financial frictions account for 11% of the aggregate productivity growth difference in the data, mainly via the innovation investment channel.
Incomplete Tariff Pass-through at the Firm Level: Evidence from U.S.-China Trade Dispute

with Chengyuan He, Chang Liu, and Soo Kyung Woo

From aggregate bilateral trade data, recent studies have found that U.S. tariff increases during the U.S.-China trade war were entirely passed on to U.S. importers. Using confidential data from U.S. Census, we show that the pass-through on U.S. importers is incomplete at the disaggregated firm-product-country level. In order to reconcile the discrepancy at different levels of aggregation, we consider the firm and product heterogeneity in various aspects: sourcing countries, number of imported varieties, import intensity from China, inventories, upstreamness, order frequency, etc. [Result disclosures coming soon]
Yajie Wang
This version: September 26, 2022 | Click here for the most recent version

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

Phone: (585) 351-4816
E-mail: yajie.wang@rochester.edu
Website: www.yajiewang.info
Citizenship: China (F1 Visa)

Education

Ph.D. in Economics, University of Rochester, USA, 2017-2023 (expected)
B.A. in Economics and B.S. in Mathematics, Renmin University of China, China, 2017

Research Interests

Macroeconomics, Labor, and Finance

Working Papers


Work In Progress

• “Borrowing From Workers: How Firms Backload Wages in Financial Distress”, *Federal Statistical Research Data Center (FSRDC) Project 2652*

Presentations

Conferences and Seminars

• 2022: University of Rochester, the Federal Reserve Bank of Philadelphia, Midwest Macro (Logan), North America Summer Meeting (Miami), Asian Meeting of the Econometric Society (Tokyo), Young Economist Symposium (Yale)

Discussions

• “Uncertainty, Liquidity Constraint, and Entrepreneurship” by Pengfei Wang, Daniel Yi Xu, Sichuang Xu, and Zhiwei Xu, *China International Conference in Macroeconomics*, June 2022

Fellowships, Scholarships, and Awards

2021-2023 NSF Doctoral Dissertation Research Improvement Grants, PI is Professor Yan Bai
2022-2023 Dean’s Post-Field Research Dissertation Completion Fellowship, University of Rochester
2021 Tapan Mitra Prize, Best 5th-Year Paper in Empirical Economics, University of Rochester
Yajie Wang

2019 Summer Research Grant, University of Rochester
2017-2022 Graduate Fellowship and Tuition Scholarship, University of Rochester
2015-2016 National Scholarship, Renmin University of China

Research Experience
- Special Sworn Status (SSS) Researcher, U.S. Census Bureau, 2021-Present
- Research Assistant for Professor Yan Bai, University of Rochester, 2019-2021
- Research Assistant for Professor George Alessandria, University of Rochester, 2020

Teaching Experience
- Instructor, Department of Economics, University of Rochester
  – ECO 108 Principles of Economics (Summer 2021), Overall Rating: 4.6/5.0
  – ECO 108 Principles of Economics (Summer 2020), Overall Rating: 4.3/5.0
- Teaching Assistant, Department of Economics, University of Rochester
  – ECO 211 Money, Credit & Banking, Professor Narayana Kocherlakota (Spring 2020, 2021)
  – ECO 207 Intermediate Microeconomics, Professor Steven Landsburg (Fall 2019, 2020, 2021)
- Teaching Assistant, Simon Business School, University of Rochester
  – STR 427 Organizational Behavior, Professor Barry A. Friedman (Fall 2020)
  – STR 401 Managerial Economics, Professor Heikki Rantakari (Fall 2019, Fall 2020)

Skills
Languages: Mandarin (native), English (fluent)
Computer Skills: Fortran, MATLAB, Python, Stata, R, \LaTeX, and SPSS

References

Professor Yan Bai (Co-Advisor)
Department of Economics
University of Rochester
Rochester, NY 14627, USA.
Phone: 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: 585-275-4991
E-mail: nkocherl@ur.rochester.edu

Professor Mark Bils
Department of Economics
University of Rochester
Rochester, NY 14627, USA.
Phone: 585-738-8859
E-mail: mark.bils@rochester.edu

Dr. Zheng Liu
Economic Research Department
Federal Reserve Bank of San Francisco
San Francisco, CA 94105, USA.
Phone: 415-974-3328
E-mail: Zheng.Liu@sf.frb.org
Yajie Wang

Uncertainty and Unemployment Revisited:
The Consequences of Financial and Labor Contracting Frictions

(Job Market Paper)

I build a novel search model to study how uncertainty shocks to firm-level productivity affect unemployment through the financial channel of incomplete labor contracts. In my model, the labor contracting friction implies wage insensitivity to firms’ idiosyncratic shocks. Hence, wage bills are debt-like commitments by firms to workers, which firms are less likely to take on when high uncertainty raises firm default risks. Therefore, when uncertainty is high, firms hire fewer workers, and unemployment increases. Quantitatively, I find that uncertainty shocks, together with aggregate productivity shocks, explain 90% of the increase in unemployment during the Great Recession. The model’s quantitative performance deteriorates greatly if either the contracting friction or uncertainty shocks are absent. Given the model’s quantitative success, I use it to analyze the impact of the United States and German labor market policies that expanded a lot in recent recessions. The U.S. policy raises unemployment benefits, making it more expensive for firms to pay wages, amplifying the recession. Germany subsidizes firms’ wage bills to keep workers employed, which outperforms the U.S. policy but still yields a negative impact since its misallocation losses outweigh its gains from insuring firms.

Automation and the Rise of Superstar Firms

(with Hamid Firooz and Zheng Liu)

During the past two decades, a rising share of production in the United States has been concentrated in a small number of superstar firms. We document evidence that the rise in automation technology has contributed to the rise in industry concentration. To illustrate the mechanism that links automation to industry concentration, we construct a general equilibrium model with heterogeneous firms, endogenous automation decisions, and variable markups. Firms choose between two types of technologies: one uses workers only, and the other uses both workers and robots subject to an idiosyncratic fixed cost of robot operation. Larger firms are more profitable and thus more likely to use the automation technology. Our calibrated model does well in matching the observed distribution of automation usage across firms with different sizes. The model predicts that a decline in the relative price of robots raises both the robot adoption rate and sales concentration, in line with the data. The employment share of superstar firms also increases with automation usage, but it rises less than the sales share because robots substitute for workers. This is also consistent with empirical evidence. The model highlights a tradeoff for policy interventions: increased automation raises aggregate productivity, and it also raises industry concentration and average markup. Under our calibration, a modest subsidy for automating firms improves welfare relative to the benchmark economy without policy intervention.
Borrowing From Workers: How Firms Backload Wages in Financial Distress

A considerable amount of empirical research has shown that firms provide partial insurance to workers against shocks to their productivity. This paper asks about the opposite direction: do workers insure firms against shocks during their times of financial distress? I use the U.S. employer-employee matched data and find that workers in financially constrained firms do have lower earnings growth first and higher growth later when there is a volatility shock. And the earnings decline is larger for firms with expected longer employment relationships. My findings imply that financially constrained firms borrow from workers through long-term employment relationships by back-loading wages.
Soo Kyung Woo

Department of Economics  
University of Rochester  
280 Hutchinson Road  
Rochester, NY 14627  
sookyung.woo@rochester.edu  
https://sookyungwoo.com

Education
Ph.D. in Economics, University of Rochester  
2017-2023 (Expected)
M.A. in Economics, Seoul National University  
2017
B.A. in Economics, Minor in Mathematics, Seoul National University, Summa Cum Laude  
2015
Student Exchange Program, National University of Singapore  
2012

Research Fields
International Macroeconomics, International Trade, Macroeconomics

Research Papers
“Real Exchange Rate and Net Trade Dynamics: Financial and Trade Shocks" with Marcos Mac Mullen
“Rising Current Account Dispersion: Financial or Trade Integration?" with George Alessandria and Yan Bai
“Dynamic Impact of Trade Liberalization: Evidence from U.S.-Korea FTA"

Work in Progress
“Incomplete Tariff Pass-through at the Firm Level: Evidence from U.S.-China Trade Dispute" with Chengyuan He, Chang Liu and Xiaomei Sui

Research Experience
Special Sworn Status Researcher, U.S. Census Bureau  
2022-Present
Research Assistant for Professor George Alessandria  
Jul 2019-2022
Research Assistant for Professor Soyoung Kim (Seoul National University)  
Mar 2015-May 2017
Research Assistant for Professor Seokbae Simon Lee (Columbia University)  
Oct 2015-Sep 2016
Intern at KB Investment and Securities Co., Ltd.  
Macroconomics Team, Research Center  
Dec 2013-Feb 2014  
Industrial Cooperation and Globalization Division  
Research Assistant at Korea Institute for Industrial Economics and Trade (KIET)  
May-Jul 2012

Teaching Experience
Teaching Assistant, Department of Economics, University of Rochester  
Intermediate Macroeconomics; Intermediate Macroeconomics Honors  
Fall 2020, Spring & Fall 2021
Economic Statistics  
Spring 2020
Intermediate Microeconomics  
Fall 2019
Teaching Assistant, Simon Business School, University of Rochester
Marketing Research and Analytics (Masters) Fall 2021
Economics and Marketing Strategy for MS Students (Masters) Fall 2021

Teaching Assistant, Seoul National University
Mathematics for Economics Spring 2015 & Summer 2016
Macroeconomics Spring & Fall 2015

Presentations
Midwest Macroeconomics Fall Meeting (scheduled), Economics Graduate Student Conference in St. Louis (scheduled), Wallis Political Economy Group (2022)*, NBER International Finance and Macroeconomics Program Meeting (2021)*, Economics Graduate Student Conference in St. Louis (2021) *coauthor presented

Fellowships and Awards
Data Research Grant, University of Rochester 2021-2022
Graduate Fellowship and Tuition Scholarship, University of Rochester 2017-2022
Ronald W. Jones Graduate Fellowship in Economics, University of Rochester 2020-2021
Korean Rochester Economics Alumni Scholarship 2018-2020
Summer Research Grant, University of Rochester 2019
Brain Korea 21 Fellowship, National Research Foundation of Korea 2015-2017
Student Directed Education Thesis Award, Seoul National University Feb 2015
Superior Academic Performance Scholarship, Seoul National University 2010-2013

Other Skills
Programming: MATLAB, Stata, Python, \LaTeX
Language: English (fluent), Korean (native), Mandarin Chinese (basic)

References

Professor George Alessandria (Advisor)
University of Rochester and NBER
Rochester, NY 14627, USA
+1 (585) 275 3096
george.alessandria@rochester.edu

Professor Yan Bai
University of Rochester and NBER
Rochester, NY 14627, USA
+1 (585) 275 4196
yan.bai@rochester.edu

Professor Narayana Kocherlakota
University of Rochester and NBER
Rochester, NY 14627, USA
+1 (585) 275 4991
nkocherl@rochester.edu
Abstracts

“Real Exchange Rate and Net Trade Dynamics: Financial and Trade Shocks''
with Marcos Mac Mullen, Job Market Paper

There is a growing consensus on the importance of financial shocks to account for the dynamics of the Real Exchange Rate (RER). The literature focuses on variations of the RER at Business Cycle or higher frequencies (less than 32 quarters), despite that most of the movement is at lower frequencies. Moreover, models driven by financial shocks miss on the robust lagged comovement of the RER with net trade flows. We offer a unified treatment of the dynamics of the RER at all frequencies, by incorporating trade shocks and heterogeneous firms with sunk costs of exporting into a model with financial shocks. We show that the model can account for the major financial and real puzzles related to the RER, while successfully capturing the comovement of the RER with net trade flows at all frequencies. While financial shocks are necessary for movements at higher frequencies, trade shocks are key to lower frequency variation that accounts for 83% of the unconditional variance of the RER.

“Rising Current Account Dispersion: Financial or Trade Integration?''
with George Alessandria and Yan Bai

This paper studies the factors accounting for the large, coincident increases in international borrowing and lending and international trade from 1970 to the present. We focus on the rise in annual changes in borrowing and lending across countries as summarized by the rise in the dispersion of the trade balance as a share of GDP. We show that these two salient features - a rise in net and gross international trade - are largely a consequence of a reduction in intratemporal trade barriers rather than a substantial reduction in the frictions on intertemporal trade or greater asymmetries in business cycles. Beyond explaining changes in the distribution of gross and net trade, the fall in frictions on intratemporal trade is consistent with the reduction in dispersion in other key macro time series such as the real exchange rate, terms of trade, and export-import ratio.

“Dynamic Impact of Trade Liberalization: Evidence from U.S.-Korea FTA''

This paper studies the dynamic effect of a trade liberalization on earnings and consumption, exploiting cross-region variation in the United States at the state level after the U.S.-Korea Free Trade Agreement. A key feature is a theoretically sound measurement of a regional exposure that takes into account the elasticity of substitution and covers all potential channels of tariff impacts. Using the measures for the Local Projection Method, I find that less protection at home is associated with a persistent negative impact: by the 8th quarter, a state at the upper quartile of the barrier cut experienced a decline in wage and consumption that is 1.56 and 1.04 percentage point larger, respectively, than a state at the lower quartile. However, cheaper access to imported inputs has a positive but temporary impact: by the 8th quarter, an upper quartile state experienced an increase in wage and consumption that is 1.62 and 1.45 percentage point larger, respectively. More opportunities to export have a little effect.

“Incomplete Tariff Pass-through at the Firm Level: Evidence from U.S.-China Trade Dispute''
with Chengyuan He, Chang Liu and Xiaomei Sui

From aggregate bilateral trade data, recent studies have found that U.S. tariff increases during the U.S.-China trade war were entirely passed on to U.S. importers. Using confidential data from U.S. Census, we show that the pass-through on U.S. importers is incomplete at the disaggregated firm-product-country level. In order to reconcile the discrepancy at different levels of aggregation, we consider the firm and product heterogeneity in various aspects: sourcing countries, number of imported varieties, import intensity from China, inventories, upstreamness, order frequency, etc. [Result disclosures coming soon]
Kai-Jie Wu  

Department of Economics, University of Rochester, Rochester NY 14627  
Phone: +1 (585) 755-7806  
Email: kai-jie.wu@rochester.edu  
Homepage: https://sites.google.com/view/kai-jiewu  
Citizenship: Taiwan (F1 Visa)

Education
- Ph.D. in Economics, University of Rochester, 2023 (expected)
- M.A. in Economics, National Taiwan University, 2016
- B.A. in Economics, National Taiwan University, 2014

Research Fields
- Macroeconomics, Economic Growth, Labor Economics

Grants Awarded

Fellowships and Prizes
- Tapan Mitra Prize for the best fifth-year empirical paper, University of Rochester, 2022
- Dean’s Post-Field Research Dissertation Fellowship, University of Rochester 2022-2023
- Donald M. and Janet C. Barnard Fellowship, University of Rochester, 2020
- Conibear Memorial Prize for the best third-year paper, University of Rochester, 2020
- Norman M. Kaplan Memorial Prize for the best course record, University of Rochester, 2019
- Graduate Fellowship and Tuition Scholarship, University of Rochester, 2017-2022
- Master Thesis Award, Taiwan Economic Association, 2016

Teaching Experiences
- Instructor, ECO 209 “Intermediate Macroeconomics,” University of Rochester, Summer 2021
- Teaching Assistant, ECO 251 “Industrial Organization,” University of Rochester, Spring 2020 and Spring 2021
- Teaching Assistant, ECO 217 “Contracts, Organizations and Markets,” University of Rochester, Fall 2019 and Fall 2020
- Teaching Assistant, “Principle of Economics,” National Taiwan University, Spring 2016
- Teaching Assistant, “Introductory Econometrics,” National Taiwan University, Fall 2015
References

• Mark Bils (advisor)
  Department of Economics, University of Rochester, Rochester, NY 14627, USA
  Phone: +1 (585) 738-8859
  Email: mark.bils@rochester.edu

• Lisa Kahn
  Department of Economics, University of Rochester, Rochester, NY 14627, USA
  Phone: +1 (585) 275-1871
  Email: lisa.kahn@rochester.edu

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

Job Mark Paper

The Rise of Specialized Firms (with Lorenz Ekerdt)

This paper studies firm diversification over 6-digit NAICS industries in U.S. manufacturing. We find that firms specializing in fewer industries now account for a substantially greater share of production than 40 years ago. This reallocation reflects the faster growth of specialized firms rather than large firms specializing. As a result, more specialized firms have increased their presence among industry leaders and have thus become a key determinant of industry concentration. We hypothesize a positive relation between specialization and product quality, and we support this view by showing that specialized firms tend to charge higher unit prices and are more insulated against Chinese import competition. Incorporating our empirical findings, we propose a theory that provides a new view on rising industry concentration: because quality is a luxury, this trend can be a natural outcome of growth shifting demand toward higher-quality products.

Working Papers

• Self-Selection and the Diminishing Returns of Research (with Lorenz Ekerdt)
  The downward historical trend of research productivity has been used to suggest that there are severe permanent diminishing returns of knowledge production. We argue that a substantial portion of the declining research productivity is a transitional phenomenon caused by self-selection in researchers’ ability and the expansion of the research sector. To quantify these short-run diminishing returns, we develop a model of self-selected researcher supply and estimate it using data on the labor share and earning distribution of researchers. We then use
our result to revisit the estimation of the knowledge production function and its resulting prediction on long-run economic growth. We find that switching from an accounting framework without considering self-selection to one with doubles the long-run growth rate of per capita income predicted by semi-endogenous growth models.

- **Labor Substitutability among Schooling Groups** (with Mark Bils and Barış Kaymak)

  (submitted)

Knowing the degree of substitutability between schooling groups is essential to understanding the role of human capital in income differences and to assessing the economic impact of such policies as schooling subsidies, immigration systems, or redistributive taxes. We derive a lower bound for the substitutability required for worldwide growth in real GDP from 1960 to 2010 to be consistent with a stable wage premium for schooling despite the rapid growth in schooling, assuming no exogenous worldwide regress in the technology frontier for workers with only primary schooling. That lower bound for the long-run elasticity of substitution is about 4, which is far higher than values commonly used in the literature. Given our bound, we reexamine the importance of human capital in cross-country income differences and the roles of school quality versus the skill bias of technology in greater efficiency gains from schooling in richer countries.

**Work in Progress**

- **Spatial Sorting of Firms in Non-Tradable Industries**

  This paper shows that, under the assumptions of monopolistic competition and constant elasticity of substitution among firms (MC+CES), the sorting between firm technology and local demand for non-tradable services can be identified by a two-way fixed effects regression of firm size at the firm-by-location level. I apply this framework to the U.S. Census data and estimate firm sorting across counties within 6-digit NAICS retail industries. I then compare the estimated sorting pattern with standard model predictions in the literature to (i) discuss the model implications under MC+CES and (ii) examine the plausibility of the MC+CES assumption.