Si Huang

Ph.D. Candidate in Economics, Queen's University
Email: si.huang@queensu.ca | Website: sihuang-econ.github.io

Education

Queen's University, Ph.D. in Economics — Expected June 2027
Supervisors: Prof. Robert Clark, Prof. Nahim Zahur, Prof. James MacKinnon
University of Toronto, M.A. in Economics — June 2021
University of Waterloo, B.A. (Honours) in Economics — June 2020

Research Interests

Empirical Industrial Organization, Competition Policy, Applied Microeconomics

Job Market Paper

Compatibility in Tied-Goods Markets: Evidence from Razors and Blades [link]

Abstract: In markets for tied goods, consumers buy a durable base good and then repeatedly purchase compatible consumables. I study how compatibility between base goods and consumables affects demand, using the U.S. razor and blade market as an empirical setting. Allowing more of a firms consumables to fit a given base good changes demand through two channels. First, it expands the market: a base good that fits more consumables is more valuable to own, attracting new buyers and making existing owners less likely to switch away. Second, it intensifies cannibalization: owners can choose among more of the firms consumables, so a newly compatible line takes sales from the firms existing lines. The balance between these channels matters for interoperability policy and for firms product decisions. Reduced-form evidence shows that compatibility shapes adoption and substitution: households that own a compatible handle more readily adopt new lines, and households substitute strongly between compatible cartridges. To separate the two channels, I estimate a dynamic demand model in which forward-looking households choose each month whether to buy a razor pack, a compatible cartridge pack, or nothing. Counterfactuals at fixed prices show that market expansion dominates cannibalization when a firm makes its product lines compatible, both across families that differ in price and quality and among similarly priced lines within a family.

Policy Papers

Beyond Leniency: Using Procurement Data to Strengthen Bid-Rigging Enforcement in Canada [link]
JDI Policy Insights, No. 26-1025, 2026

Working Papers

An Investigation into the Bidding Process for WIC Infant Formula Contracts [link]
Joint with Rob Clark and David Davis

Abstract: Motivated by the FTC's ongoing investigation, this paper examines whether infant formula manufacturers colluded in bidding for WIC infant formula contracts. Using auction data from 2003 to 2021, we compare bidders behavior during a competitive benchmark period (2003–2013) with that observed in the alleged collusive period (2016–2021). Descriptive patterns reveal that participation declined in the alleged period—consistent with reduced competition—yet when Abbott and MJ met head-to-head, winning bids fell even more sharply. Incumbents were more likely to retain contracts, but only by bidding more aggressively, not through rivals restraint. To formally test for collusion, we implement state-of-the-art collusion screens that target two behaviors central to the FTCs allegation: bid rotation and cover bidding. These include tests from Kawai et al. (2023), Porter and Zona (1993), Huber and Imhof (2019) and Clark et al. (2025). Across these methods, we find little evidence of systematic bid rigging in WIC auctions during the alleged period.

Presented at: Canadian Economics Association Annual Meetings (May 2025, Montreal); Agricultural & Applied Economics Association Annual Meeting (July 2025, Denver)

Work in Progress

Screens for Collusion: How Much Should We Trust Them?

Abstract: Competition authorities around the world rely on statistical screens to detect potential bid rigging and identify cases that warrant further investigation. Although many screens have been proposed in the literature, little is known about their relative effectiveness. This paper addresses this gap by simulating competitive and collusive bidding data using a structural auction model, applying widely used screens, and systematically comparing their performance across different collusive scenarios.

Teaching Experience

Teaching Assistant, Queen's University Sept 2021 – Present

- Ph.D.-level: ECON 816 – Advanced Macroeconomic Theory I (Fall 2022, Fall 2023, Fall 2024); ECON 817 – Advanced Macroeconomic Theory II (Winter 2023, Winter 2024, Winter 2025)
- Undergraduate: ECON 111 – Introductory Microeconomics (Summer 2025, Summer 2026); ECON 223 – Macroeconomic Policy (Summer 2023, Summer 2024); ECON 256 – Math for Economics and Business (Winter 2026); ECON 310 – Microeconomic Theory II (Winter 2022); ECON 352 – Applied Econometrics (Fall 2026); ECON 361 – Income Distribution and Inequalities (Fall 2021); ECON 435/835 – Development Economics (Fall 2025)

Teaching Assistant, University of Toronto Sept 2020 – Apr 2021

- ECO 220 – Introduction to Data Analysis and Applied Econometrics (Fall/Winter 2020/2021)

Awards and Fellowships

- John Deutsch Institute Fellowship in Economic Policy (2025–2026), Queen's University
- W Edmund Clark Scholarship (2024–2025), Queen's University
- Christine Morin Fellowship (2021–2025), Queen's University
- QED Department Award (2021–2025), Queen's University
- Queen's Graduate Award (2023), Queen's University
- Justice D. Henry Award (2023), Queen's University
- Departmental Award for Distinguished Academic Achievement (2020), University of Waterloo—awarded to the top graduating student
- Faculty of Arts Upper-Year Scholarship (2020), University of Waterloo

Technical Skills

Programming: R, Stata, MATLAB, Python
Languages: English, Chinese, Dutch (basic)

Service and Outreach

- Graduate Mentor, Faculty of Arts and Science, Queen's University (Sept 2024 – Oct 2026)
  - Advised prospective graduate students on graduate study and student life at Queen's.
- Research Consultant, PhD-Community Initiative, in partnership with Kingston Economic Development Corporation (KEDC), Queen's University (Sept 2024 – May 2025)
  - Designed an entrepreneurship program for older adults as part of an interdisciplinary team of Ph.D. students.
  - Presented our findings to the public at Kingston City Hall.

References

Robert Clark
Professor
Department of Economics
University of Toronto
rob.clark@utoronto.ca

Nahim Zahur
Assistant Professor
Department of Economics
Queen's University
nahim.zahur@queensu.ca

James MacKinnon
Emeritus Professor
Department of Economics
Queen's University
mackinno@queensu.ca

Mathieu Marcoux
Associate Professor
Department of Economics
Université de Montréal
mathieu.marcoux@umontreal.ca