Hyung-Jin Kim

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Click here for the latest CV (Last updated: November 15th, 2023)

CONTACT INFORMATION

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EDUCATION

- Ph.D. in Economics, University of Pittsburgh, expected graduation date: May 2024
- M.S., Economics, Sungkyunkwan University, Seoul, Korea, 2017
- B.A., Economics and Philosophy, Sungkyunkwan University, Seoul, Korea, 2015
- Exchange Student, Radboud University, Nijmegen, Netherlands, 2013

RESEARCH INTERESTS

- Primary Fields: Empirical Industrial Organization, Health Economics
- Secondary Fields: Applied Microeconomics, Machine Learning, and Applied Econometrics

PUBLICATIONS

- Estimating Switching Costs for Telecommunications Services and Bundles (with Hyunchul Kim, Accepted at Applied Economics, Pre-Ph.D. work)

WORKING PAPERS

- Rural Pharmacy Access and Competition: Static Games with Machine Learning (Job Market Paper)
- Horizontal Merger and Post-Entry Market Structure: Evidence from Acquisition in the Retail Pharmacy Market (Preliminary)

CONFERENCE AND PRESENTATIONS

- Boston University IO Reading Group, Fall 2023
- EARIE (European Association for Research in Industrial Economics) 2023 at Rome, Summer 2023
- IAAE (International Association for Applied Econometrics) 2023 at Oslo, Summer 2023
- NASM (North America Summer Meeting of the Econometric Society) at Los Angeles, Summer 2023
- The 37th Annual Conference of the Pennsylvania Economic Association at Washington, Summer 2023
- Pittsburgh Medley Conference, Pittsburgh, Summer 2022
- Applied Microeconomics Colloquium, Carnegie Mellon University, Summer 2020
- Applied Microeconomics/Econometrics Seminar, University of Pittsburgh 2018-2023

HONORS AND AWARDS

- Travel Grants
  - GPSG Travel Grants 2023, A&S PBC Travel Grants 2023, A&S GSO Travel Grants 2023, University of Pittsburgh Travel Grants 2022-2023/2023-2024
- Social Science Doctoral Dissertation Fellowships, University of Pittsburgh ($23,500), Fall 2019 - Summer 2020
- Summer Research Fellowship, University of Pittsburgh ($3,000), Summer 2019
- Arts and Sciences Fellowship, University of Pittsburgh ($23,500), Fall 2017 - Spring 2018
- Best paper award at 4th Media Panel Conference Presentation ($2,000), KISDI (Korea Information Society Development Institute), Summer 2016
- SKKU honorable/merit-based scholarships, Spring 2012, Fall 2012, Fall 2015, Spring 2016,

TEACHING EXPERIENCE

- Instructor, University of Pittsburgh
  - Applied Econometrics, Summer 2021. (Teaching Evaluation: 4.63/5, Link to Teaching Evaluation)
- Teaching Assistant, University of Pittsburgh
  - 1st-year Ph.D. Year Econometrics 2, Spring 2020
  - Introduction to Microeconomics, Spring 2019, Fall 2021, Fall 2023
  - Introduction to Macroeconomics, Fall 2019, Summer 2020, Fall 2022

- Grader, University of Pittsburgh
  - Game Theory, Fall 2018, Fall 2023
  - Intermediate Macroeconomics, Spring 2022
  - Applied Econometrics, Spring 2023

WORKING EXPERIENCE

- Economist Intern - Core AI, Amazon, Seattle, May 2022-August 2022.
  - Estimated the (causal) price elasticity with respect to new sellers in the Amazon marketplace.
  - Conducted analysis on causal inference, implemented modern machine learning tools including Double/Debiased Machine Learning and Causal Forest and presented research results to management and internal audiences.
  - Improved model libraries owned by Amazon, utilizing its unique dataset and leveraging theories in Statistics and Econometrics within the Core-AI.
  - Rated as "hired" (Full-time Economists Position, L4)

PROFESSIONAL MEMBERSHIPS

- The Econometric Society, American Economic Association, European Economic Association, International Association for Applied Econometrics

OTHER PROFESSIONAL EXPERIENCE

- Mentor for Ph.D. student in Ph.D. Economics, University of Pittsburgh, 2019-2021
- Department Delegate, Arts & Sciences GSO, University of Pittsburgh, 2019-2020
- Research Assistant to Prof. Arie Beresteanu, University of Pittsburgh, Summer 2020
- Military Service: Sergeant, Administrative Specialist, South Korea, 2009-2011

LANGUAGES

- Korean (native), English (Fluent)

PROGRAMMING SKILLS

- Python, MATLAB, Julia, R, SQL, and Stata

REFERENCES

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PLACEMENT OFFICERS

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PAPER ABSTRACTS

"Rural Pharmacy Access and Competition: Static Games with Machine Learning (JMP)"
Abstract: This paper provides the first empirical evidence for the impact of the entry of chain pharmacies on competition, market structure, and pharmacy access in rural towns. Using a detailed panel dataset spanning 2000-2019 in the Midwestern United States, I find that the entry of new chain pharmacies in urban towns is associated with the exit of independent pharmacies from nearby rural towns. These industry shifts contribute to a decrease in pharmacy access in rural towns, especially in towns where over 20 percent of the population is aged 65 or older. To decompose the competition effects from chain pharmacies and rival independent pharmacies, I utilize popular structural game models. To allow for a data-driven selection of various market characteristics in pharmacy profits, I incorporate double/debiased machine learning (DML) into the estimation of static games with incomplete information. By leveraging the predictive performance of machine learning estimators, I find that the impact of a competing independent pharmacy on profit is 50 percent greater than that implied by existing models. In rural towns with a high elderly population ratio, the estimated model shows that chain pharmacy entries could explain 40 percent of the closures of independent pharmacies between 2000 and 2019. A subsidy policy counterfactual simulation shows that 16 percent of rural towns previously identified as having limited pharmacy access would no longer be categorized as such.

Horizontal Merger and Post-Entry Market Structure: Evidence from Acquisition in the Retail Pharmacy Market
Abstract: This paper provides the first causal estimates of the effects of horizontal mergers on post-entry behaviors. I study whether horizontal mergers of dominant firms reduce competition and facilitate market entry for new entrants. The horizontal merger guidelines, issued by the Department of Justice and the Federal Trade Commission, state that regulatory agencies should evaluate whether post-merger entry would be timely, likely, and sufficient to counteract any adverse effects on competition. I evaluate post-merger entry behavior by examining the controversial horizontal merger between Walgreens and Rite Aid in 2018, where Walgreens and Rite Aid respectively held the first and third ranks in market shares. This merger raised public and antitrust concerns, as mergers between dominant firms can decrease competition and reduce consumer welfare. Using a staggered difference-in-differences estimation approach, I find that horizontal mergers are associated with a 0.6-unit (17%) decrease in the total number of stores, which could decrease the competition. Furthermore, I find no causal evidence that horizontal mergers lead to new market entries by non-merging competitors. These findings challenge the assertion by merging firms that any reduction in competition from a merger would be offset by new entries. For antitrust policy, these results suggest that policymakers might need to scrutinize proposed horizontal mergers more rigorously, taking potential market entry into consideration to adequately address antitrust concerns.

Estimating Switching Costs for Telecommunications Services and Bundles(with Hyunchul Kim, Accepted at *Applied Economics*, Pre-Ph.D. work)
Abstract: We develop a consumer-level demand model of telecommunications and broadcasting services taking into account the exhaustive set of alternatives available to consumers, including bundled services. We then estimate the switching costs associated with bundling. Previous studies are confined to choices of only one or two services, rather than addressing interrelationships among different services made possible through bundling. We find that our approach improves the accuracy of switching cost estimates compared with when the choice sets are restricted to in-demand models. Our results also indicate that switching costs incurred with bundling are substantial, making up approximately 65% of monthly service costs.