

Jinsoo Bae

Office Address

Department of Economics
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Citizenship and Visa Status

South Korea (F-1 visa)

Education

Ph.D. Economics, The Ohio State University, 2020 (expected)
Dissertation: "Three Essays on Multi-unit Auctions"
Committee: John H. Kagel (chair), Dan Levin, Paul J. Healy, James Peck
M.A. Economics, The Ohio State University, 2015
M.A. Economics, Yonsei University, 2014
B.A. Economics, Yonsei University, Magna Cum Laude, 2012

Teaching and Research Fields

Primary fields: Experimental Economics, Auction Theory
Secondary fields: Industrial Organization

Publications

Bae, J., & Kagel, J. H. (2019). An Experimental Study of the Generalized Second Price Auction. *International Journal of Industrial Organization*, 63, 44-68.

"Fixed Broadband and Wibro (Wireless Broadband): Are They Substitutes or Complements?" *The Korean Journal of Economics*, Vol. 22 (2015), No. 2, with Yun Jeong Choi, Jong-Hee Hahn.

Research Papers

"Selling Shares to Budget Constrained Bidders: An Experimental Study of the Uniform Price Auction and the Proportional-Share Auction" (**Job Market Paper**)

We experimentally investigate the implications of weak and strong budget constraints on two share auctions, the uniform price auction and the proportional share auction, compared to the effects on the first price auction. Under the strong budget constraint, the two share auctions raised higher revenue than the first price auction, which contrasts with previous studies without budget constraints. More surprisingly, the proportional share auction achieved higher efficiency than the first price auction despite its inherent inefficient allocation rule. The proportional share auction performed better than the uniform price auction under the strong budget constraint, but under the weak budget constraint, the uniform price auction performed the same or better than the proportional share auction. Lastly, a modified rule to enforce budget constraints in the uniform price auction makes it less susceptible to the budget constraints and improves efficiency and revenue under all budget constraint levels.

“A Pro-Competitive Effect of Joint Bidding in Multi-Unit Uniform Price Auctions with Asymmetric Bidders”

This paper studies a pro-competitive effect of joint bidding in multi-unit uniform price auctions where bidders have private values and demand different quantities of units. We analyze a simple model with three identical items for sale, two small bidders each demanding a single unit, and a big bidder demanding two units. We show that joint bidding of the two small bidders, which recovers the symmetry of bidders, enhances competition among the bidders and increases efficiency and revenue of the auction.

“Regularization Methods on Almost Ideal Demand System”

Research in Progress

“Optimal vs Standard Auctions in the Maximum Game: An Experimental Study”

Recent theoretical studies have shown that when bidders have a common resale opportunity in the future, posted-price selling is the optimal mechanism to sell an item, raising more revenue than auctions. We plan to design an experiment according to the theoretical model and conduct the experiment to investigate whether the theoretical prediction holds in the lab environment.

“Reneg-free auctions”

This paper aims to characterize all auction mechanisms that have renege-free properties under static and dynamic environments. Under the static environment, all renege-free auctions must have the all-pay structure meaning every bidder must pay what they bid. Under dynamic environment, all-renege free auctions must be pay-per-bid auctions (e.g. descending price auction, penny auction, war of attrition, price reveal auction) meaning bidders must pay whenever updating their bids. Lastly, any strategy proof mechanisms are not compatible with renege-free auctions under both static and dynamic environments.

Conference and Seminar Presentations

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| 2019 | Economic Science Association North American Meeting, Los Angeles, CA
Nanjing International Conference on Game Theory
Stony Brook International Conference on Game Theory, Stony Brook, NY |
| 2018 | Summer School of Econometric Society in Singapore
Midwest Economic Association Annual Meeting, Evanston, IL
Annual International Industrial Organization Conference, Indianapolis, IN |
| 2017 | Economic Science Association North American Meeting, Richmond, VA
Midwest Economic Association Annual Meeting, Cincinnati, OH
Midwest Graduate Student Summit on Applied Economics and Regional Science, Columbus, OH |

Research Experience and Other Employment

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| 2018-2020 | The Ohio State University, Graduate Research Assistant for Professor John H. Kagel |
| 2014 | Korea Electric Power Corporation, Junior Researcher
- Long Term Electricity Demand Forecasting (Project leader: Joon Y. Park) |
| 2012-2013 | Social Science Korea, Research Assistant |

Professional Activities

Referee for: *Eastern Economic Journal*, *Telecommunications Policy*

Honors, Scholarships, and Fellowships

- 2019 Burton-Abrams Dissertation in Economics Award (\$1,200)
 NSF Doctoral Dissertation Improvement Awards (\$11,981)
 Alumni Grants for Graduate Research and Scholarship (\$2,940)
 JMCB Grant for Graduate Student Research (\$2,500)
- 2017 L. Edwin Smart Departmental Citation for Excellence in Teaching
 JMCB Grant for Graduate Student Research (\$1,848)
- 2014-2015 University Fellowship, The Ohio State University
- 2012-2013 Brain Korea 21 Fellowship, National Research Foundation of Korea

Teaching Experience

- Spring 2018 Graduate Micro Theory 2B, The Ohio State University, Teaching assistant
- Spring 2017 Graduate Micro Theory 2B, The Ohio State University, Teaching assistant
- Fall 2016 Principles of Macroeconomics, The Ohio State University, Teaching assistant
- Summer 2016 Graduate Microeconomics, The Ohio State University, Departmental tutor
- Spring 2016 Graduate Micro Theory 2B, The Ohio State University, Teaching assistant
- Fall 2015 Principles of Microeconomics, The Ohio State University, Teaching assistant

References

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