# JONG JAE CHOI (JONG)

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Address 336, Sicheong-daero, Sejong-si Republic of Korea, 30147

### **Education**

Ph.D. in Economics, New York University, 2020-2025
Dissertation Title: Essays on Sequential First-Price Auctions
M.S. in Economics, University of Wisconsin-Madison, 2018-2020
Double Degree in Psychology and Business Administration, Yonsei University-Seoul, 2014

#### References

Professor Quang Vuong 19 West Fourth St., 8<sup>th</sup> Floor New York, NY 10012-1119 212-998-8900 (office) gyuong@nyu.edu Professor Boyan Jovanovic 19 West Fourth St., 7<sup>th</sup> Floor New York, NY 10012-1119 212-998-8953 (office) bj2@nyu.edu

Professor Daniel Waldinger 19 West Fourth St., 8<sup>th</sup> Floor New York, NY 10012-1119 dw120@nyu.edu

## **Fields of Interest**

Auction, Econometrics, Industrial Organization (Market Design)

#### **Employment and Research Experience**

2025 - Associate Fellow at Korea Institute of Public Finance 2021 - 2024 Research Assistant for Professor Boyan Jovanovic 2014 - 2018 Junior Economist at the Central Bank of Korea

Supported the Governor's attendance at BIS bimonthly meetings

Engaged in open market operations

#### **Working Papers**

Sequential First-Price Auctions under Partial Disclosure: An Application to Korean Fruit Auction (Job Market Paper)

I consider a model in which a first-price auction sells one object at a time and repeats. During this repetition, only the winner and the winning bid are announced after each auction. A bidder uses this announcement to adjust his bidding strategies in order to win multiple objects across the repeated auctions. I narrow the repetition down to a two-period, so that I can nonparametrically identify a bidder's strategy and the complementarity between objects that motivates him to acquire multiple objects. I apply this model to the Korean Fruit Auction and suggest using an alternative auction design, the Product-Mix Auction. This design finds a uniform price for each variety, so farmers need not worry that their produce might be sold at the trough of the oscillatory winning bids inherent in the current auction design. Moreover, the alternative design mitigates the bid shading typical of uniform-price auctions, thereby protecting farmers' interests; as a result, the outcome of the design aligns with the government's objectives.

Disentangling Affiliation and Synergy in First-Price Auctions under Limited Disclosure

I consider a two-period first-price auction where the auctioneer sells a single unit each period, and discloses only the winner's identity between the periods. If a bidder wins both auctions, either (a) the first unit makes the second unit more valuable (synergy) or (b) the first unit has no causal effect (no synergy) but is a byproduct of a bidder highly valuing both units (affiliation); the presence of synergy entails different auction design, such as whether to bundle both units or not. Under the independent private value paradigm, I develop a model that treats synergy and affiliation separately. For the separation, I use a nonparametric identification strategy; the strategy is also applied to making the kernel density estimator whose simulation result shows its accuracy.

### **Works in Progress**

Econometrics in Sequential First-Price Auctions (with Quang Vuong)

Two working papers above assume a two-period framework. This project aims to extend the model to three or more periods while maintaining the nonparametric identifiability of the model's parameters.

# Honors, Scholarships, and Fellowships

2020-2025 MacCraken Fellowship

2018 Exemplary staff at the International Affairs Department
2016 Governor's Award for Annual Paper Competition – 1<sup>st</sup> prize

Details in Pre-PhD Publication

## **Pre-PhD Publication**

Na, Hyunjoo and Jong Jae Choi (2016), "Analysis of Financial Market Responses to Economic News," *Bank of Korea's Monthly Bulletin*, 7: 38-72. (Korean, English)

# **Other Information**

Department Activity Organizer of the Student Econometrics Lunch Seminar at NYU,

Jan 2024 – May 2025

Programming Python (Numba, multiprocessing), MATLAB

Military Status Served a two-year duty in the South Korean Army, 2008-2010

Citizenship South Korea, United States

Last Updated: June 26, 2025