

KYUNGHO LEE

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Education

Yale University

- Ph.D. in Economics
- M.Phil. Economics

Expected May 2027
2025

Seoul National University

- M.A. Economics
- B.A. Economics with *Summa Cum Laude*

2021
2019

Research Interests

Industrial Organization, Applied Microeconomics, Econometrics, Machine Learning and Unstructured Data

Teaching Experiences

Yale University, Teaching Fellow

2023 - 2025

- Introduction to Probability and Statistics, Introduction to Microeconomics, Econometrics I & II (PhD), Math Camp: Programming (PhD)

Seoul National University, Teaching Assistant

2020 - 2021

- Basic Computing, Studies in Econometrics (PhD)

Research Experiences

Research Assistant to Prof. Katja Seim

2025

Research Assistant to Prof. Yoon-Jae Whang

2019 - 2021

Research Assistant to Prof. Sukjin Han

2018 - 2020

Seminars and Conferences

ESIF Economics and AI+ML Meeting, Yale FDS: AI for Social Science

2026

Econometric Society World Congress, ACM Conference on Economics and Computation, AI at Yale

2025

Asia-Pacific Industrial Organization Conference

2024

Honors, Awards and Fellowships

University Dissertation Fellowship, Yale University

2026 - 2027

Arvid Anderson Prize Fellowship, Yale University

2025 - 2026

Nathan Hale Fellowship, Yale University

2024

Distinction, Econometrics Qualifying Examination, Yale University

2023

Young Economist, 7th Lindau Nobel Laureate Meeting on Economic Sciences

2022

SBS Scholarship (Full Overseas PhD Funding), SBS Foundation

2021 - 2027

Cowles Foundation Fellowship, Yale University

2021 - 2027

Highest Honor Undergraduate Thesis, Seoul National University

2019

Presidential Eminence Scholarship (Merit-Based Full Scholarship), Seoul National University

2018

Professional Activities and Others

Referee

American Economic Review

Service

Yale IO Tea Organizer

Software Skills

Python, Stata, MATLAB, R

Languages

English (Fluent), Korean (Native), Mandarin Chinese (Good)

Citizenship

Republic of Korea (F-1 Visa)

Working Paper

“Copyright and Competition: Estimating Supply and Demand with Unstructured Data”

2025, *arXiv:2501.16120* (with Sukjin Han)

We study the competitive and welfare effects of copyright in creative industries in the face of cost-reducing technologies such as generative artificial intelligence. Creative products often feature *unstructured* attributes (e.g., images and text) that are complex and high-dimensional. To address this challenge, we study a stylized design product – fonts – using data from the world’s largest font marketplace. We construct neural network embeddings to quantify unstructured attributes and measure visual similarity in a manner consistent with human perception. Spatial regression and event-study analyses demonstrate that competition is local in the visual characteristics space. Building on this evidence, we develop a structural model of supply and demand that incorporates embeddings and captures product positioning under copyright-based similarity constraints. Our estimates reveal consumers’ heterogeneous design preferences and producers’ cost-effective mimicry advantages. Counterfactual analyses show that copyright protection can raise consumer welfare by encouraging product relocation, and that the optimal policy depends on the interaction between copyright and cost-reducing technologies.

Publications

“Testing for Time Stochastic Dominance”

2023, *Journal of Econometrics*, 235(2), 352-371. (with Oliver Linton, Yoon-Jae Whang)

We propose nonparametric tests for the null hypothesis of time stochastic dominance. Time stochastic dominance makes a partial order of different prospects over time based on the net present value criteria for general utility and time discount function classes. For example, time stochastic dominance can be used for ranking investment strategies or environmental policies based on the expected net present value of the future benefits. We consider an L_p -type test statistic and derive its large sample distribution under standard panel data sampling scheme with fixed time dimension. We suggest a path-wise (or cluster) bootstrap procedure that allows individual time series dependence over the time horizon. We describe two approaches, the contact-set approach and the numerical delta method, that may lead to enhanced power compared to the conventional least-favorable-case based approach. We prove the asymptotic validity of our testing procedures. We investigate the finite sample performance of the tests in simulation studies. As an illustration, we apply the proposed tests to evaluate the Million Baht Village Fund Program in Thailand and carbon emission trading scheme in China.

- Best Student Paper Prize, Korean Economic Association

2020

“Minimum Wage, Social Insurance Mandates, and Work Hours”

2023, *Journal of Public Economics*, 225, 104951. (with Ji Hwan Kim, Jungmin Lee)

Raising the minimum wage may have unintended negative consequences for workers. In South Korea, employers are required to contribute towards their employees’ social insurance, with the amount proportional to earnings. However, workers employed for less than 60 h per month are exempt from this contribution requirement. Using administrative payroll records from 2011 to 2019, we find that raising the minimum wage results in a higher share of the exempt workers. Our results remain robust when focusing on unanticipated hikes in the minimum wage in 2018 and 2019.

- Top 50 Outstanding Research, Ministry of Education of the Republic of Korea

2024

- Korean Economy Research Award: Best Paper in Microeconomics, Korean Economic Association

2023

“Testing for Stochastic Dominance in Stata”

Accepted at Stata Journal (with Yoon-Jae Whang)

We introduce the Stata command `pysdtest` for statistical tests of stochastic dominance. `pysdtest` implements various testing procedures such as Barrett and Donald (2003), Linton et al. (2005), Linton et al. (2010), and Donald and Hsu (2016), along with their extensions. Users can flexibly combine several resampling methods and test statistics, including the numerical delta method (Dümbgen, 1993; Hong and Li, 2018; Fang and Santos, 2019). We first provide an overview of the concepts of stochastic dominance and testing methods. Then, we offer practical guidance for the Stata command `pysdtest`. We apply `pysdtest` to investigate the portfolio choice problem between the daily returns of Bitcoin and the S&P 500 index as an empirical illustration. Our findings indicate that the S&P 500 index returns second-order stochastically dominate the Bitcoin returns.

Software

PySDTest

Python package for statistical tests of stochastic dominance. (with Yoon-Jae Whang)

`pip install pysdtest` | [PyPI](#) | [GitHub](#)