# MINCHUL PARK

☑ minchul1352@korea.ac.kr

econompark.github.io github.com/econompark

## RESEARCH INTERESTS

Econometrics, Causal Inference, Applied Microeconomics, Data Science

#### **PUBLICATIONS**

"A selection correction method for heterogeneous treatment effects in staggered adoption settings", single-authored, 2025, Economics Letters, 254, 112490.

"Hunting for fresh food: The impact of online fresh food platforms on health", with Woo Hyeok An and Jae Il Choi, 2025, Health & Place, 91, 103400.

"Do news articles contain information useful for forecasting copper prices?", single-authored, 2025, Journal of The Korean Data Analysis Society, 27(4), 1063–1080.

# **EDUCATION**

Ph.D., Economics, Korea University

Feb. 2026 (expected)

M.A., Economics, Korea University

Feb. 2021

B.Econ., Economics, Chosun University

Feb. 2019

B.S., Mathematics, Chosun University

Feb. 2019

# WORKING PAPERS

"Difference-in-differences for heterogeneous treatment effects in staggered and self-selected adoption settings" (job market paper)

"A parametric specification test for Roy models", with Chirok Han (draft available)

"Bootstrap inference on imputation-based treatment effect estimation with high-dimensional fixed effects", with Sang Soo Park (draft forthcoming)

## WORK IN PROGRESS

"Machine learning-based standard errors for imputation-based treatment effect estimators"

# **PRESENTATIONS**

The International Conference of the Association of Korean Economic Studies in Jakarta, Indonesia

Aug. 2023

The Korean Econometric Society Summer Conference in Seoul, South Korea

Jun. 2024

# TEACHING EXPERIENCE

### Instructor

- (in English) Principles of Economics I (Undergraduate, Korea University)

Fall 2025

- Econometrics I (Undergraduate, Korea University)

Winter 2023, Summer 2024

- Mathematics for Economists (Undergraduate, Korea University)

Summer 2023

- R Programming (2-day course, Korea University)

Sep. 2023

#### Teaching Assistant

- Econometric Analysis (Graduate, Korea University)

Fall 2022

- Intermediate Econometrics (Undergraduate, Korea University)

Spring 2021

- Econometrics I (Undergraduate, Korea University)

Spring 2020

- Statistics for Economists (Undergraduate, Korea University)

Fall 2019

## RESEARCH PROJECTS

Research assistant, Development of global demand forecasting and analysis/prediction system of market/industry trends, Institute of Information & Communications Technology Promotion Jan. 2023 - Dec. 2024

## **SERVICE**

Administrative coordinator, Korean Econometric Society Feb. 2024 - Feb. 2025 Administrative assistant, Fiscal Experts Network, Korea Institute of Public Finance Apr. 2023 - Dec. 2023

# STATA MODULES

DIDSELECT: Stata module to implement the difference-in-differences estimation in staggered and self-selected adoption ROY\_SPECIFICATION: Stata module to implement specification tests for Roy models

DID\_IMPUTATION\_WILD: Stata module to implement bootstrap variance estimation for the imputation-based treatment effect estimator with high-dimensional fixed effects

## SCHOLARSHIPS AND AWARDS

#### Scholarships

- Brain Korea 21 Plus Scholarship, National Research Foundation of Korea, Korea University	2019 - 2023
- Academic Excellence Scholarship, Chosun University	2016 - 2018
wards	

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- Outstanding Paper Award, Korea University	2025
- Excellence Award, Research Proposal Competition, Korea University	2022, 2023
- First Prize, Undergraduate Research Conference, Chosun University	2016
- Excellence Award, Academic Report Competition, Chosun University	2016
- Dean's List, Chosun University	2016 - 2018
- Certificate of Commendation for Exemplary Service (military service as an auxiliary police officer),	
Gwangju Metropolitan Police Agency	2014

## LANGUAGES AND COMPUTER SKILLS

#### Languages

- English (advanced), Korean (native)

# Computer Skills

- Stata, Mata, R, Matlab, Python, LATEX

### References

Professor Chirok Han

Department of Economics Korea University

Email: chirokhan@korea.ac.kr

Professor Myoung-jae Lee

Department of Economics Korea University

Email: myoungjae@korea.ac.kr

Professor Sang Soo Park

Department of Economics Korea University

Email: starpac@korea.ac.kr

# JOB MARKET PAPER

# Difference-in-Differences for Heterogeneous Treatment Effects in Staggered and Self-Selected Adoption Settings

This paper proposes a new difference-in-differences estimator to estimate heterogeneous treatment effects in staggered adoption settings. To identify the average treatment effects, the proposed method introduces a selection model for treatment timing. With this model, the counterfactual trends in the difference-in-differences parameters are identified by deriving specific forms for the averages of unobserved confounders in those trends. This approach allows never-treated potential outcomes to be generated by an interactive fixed effects model, which permits non-parallel trends of the never-treated outcomes arising from unobserved confounders. Moreover, unlike most methods based on interactive fixed effects models, the proposed method does not require a large number of pre-treatment periods. The empirical relevance of the proposed method is illustrated by estimating the short-term effects of first childbirth timing on women's labor market outcomes. For practical implementation, a Stata command didselect is provided.