MYUNGKOU SHIN

CONTACT Address: Phone: +1) 312-366-8017

Email: myungkoushin@uchicago.edu Saieh Hall for Economics **INFORMATION**

> 1126 E. 59th Street Website: myungkoushin.com Chicago, Illinois 60637 Nationality: Republic of Korea

EDUCATION The University of Chicago

Ph.D. in Economics 2017-2023 (expected)

Seoul National University

M.A. in Economics 2015-2017 B.A. in Economics. 2009-2015

References

Stéphane Bonhomme (chair)

The Ann L. and Lawrence B. Buttenwieser Professor of Economics

The University of Chicago sbonhomme@uchicago.edu

Christian Hansen

Azeem Shaikh Wallace W. Booth Professor of Ralph and Mary Otis Isham Professor of

Economics **Econometrics and Statistics**

The University of Chicago The University of Chicago chansen1@chicagobooth.edu amshaikh@uchicago.edu

FIELDS OF Primary: **Econometrics**

INTEREST Secondary: Applied microeconomics

RESEARCH Working paper

Clustered Treatment in Multilevel Models (job market paper, draft)

- I develop a multilevel model for empirical contexts where each individual belongs to a cluster and a treatment is endogenously assigned at the cluster level. When treatment assignment is clustered, the treatment effect cannot be identified in a model with fully flexible cluster heterogeneity. To put restrictions on cluster heterogeneity, I assume that potential outcomes are independent of the treatment, conditioning on two sets of variables: cluster-level characteristics, and the distribution of individual-level characteristics for each cluster. With this selection-on-distribution framework, I control for treatment endogeneity and show how to recover treatment effect heterogeneity in both individual-level and cluster-level variables. To implement this idea, I propose a two-step estimation procedure based on a \$K\$-means algorithm. In the first step, I group clusters in terms of their distributions of individual-level characteristics. In the second step, I use the grouping structure to estimate the treatment effect. To illustrate the method, I study the disemployment effect of a raise in the minimum wage level on teenagers.

Finitely Heterogeneous Treatment Effect in Event-study (draft)

- Treatment effect estimation strategies in the event-study setup, namely panel data with variation in treatment timing, often use the parallel trend assumption that assumes mean independence across different treatment timings. In this paper, I relax the parallel trend assumption by including a latent type variable and develop a conditional two-way fixed-effects model. With a finite support assumption on the latent type variable, I show that an extremum classifier consistently estimates the

type assignment. Then I solve the endogeneity problem of the selection into treatment by conditioning on the latent type, through which the treatment timing is correlated with the outcome. I also allow treatment to affect units of different types differently and thus directly model and estimate type-level heterogeneity in treatment effect.

Work in progress

Clustering Sensitivity with Weakly Dependent Data

- The use of clustered standard errors can be justified with a weak dependence assumption: given a metric of distance between units of observations, such as geographical distance, dependence between two units fades away as the distance grows. Under the weak dependence structure, any clustering structure is valid for inference as along as it clusters observations in a way that the distance between units from different clusters is large. This paper shows that there is large variation in the inference result based on the choice of the clustering structure and suggests a simple remedy to summarize multiple inference results based on multiple clustering structures.

TEACHING The University of Chicago

Fall 2018	Empirical Analysis I (PhD), TA for Prof. Azeem Shaikh	
Winter 2019	Empirical Analysis II (PhD), TA for Prof. Lars Peter Hansen and Prof. Harald Uhlig	
Spring 2019	Econometrics (Undergraduate), TA for Prof. Azeem Shaikh	
Fall 2019	Microeconomics (MBA), TA for Prof. Michael Gibbs	
Spring 2020	Econometrics (Undergraduate), TA for Prof. Azeem Shaikh	
Spring 2021	Topics in Econometrics (PhD), TA for Prof. Stephane Bonhomme	
Spring 2022	Topics in Econometrics (PhD), TA for Prof. Stephane Bonhomme	

HONORS AND The University of Chicago

AWARDS	2017-2022	Social Science Division Fellowship

2017-2022 Neubauer Fellowship

2018 Lee Prize, highest score earned on the price theory core exam

2022-2023 George J. Stigler Fellowship

2022-2023 Immasche Fellowship

The Korea Foundation for Advanced Studies

2017-2022 Overseas PhD Scholarship

SERVICE Referee

Marketing Science, Food Policy