# Chengye Jia

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# Academic Appointments

Assistant Professor, Shandong University of Finance and Economics, 2021-

### Education

Ph.D., Economics, Temple University, 2021

M.A., Economics, Temple University, 2018

B.A., Economics, Shandong University of Technology, 2014

#### Research Interests

Microeconometrics, Labor Economics, Environmental Economics

## Working Papers

1. Inference on Counterfactual Transition Matrices, (Job Market Paper)

Abstract: Transition matrices provide a very useful way to summarize the dependence between two random variables; for example, the dependence between parents' income and child's income. This paper considers estimation and inference techniques for (i) conditional transition matrices – transition matrices that are conditional on some vector of covariates, (ii) counterfactual transition matrices – transition matrices that arise from holding fixed conditional transition matrices but adjusting the distribution of the covariates, and (iii) transition matrix average partial effects. Estimating conditional transition matrices is closely related to estimating conditional distribution functions, and we propose new semiparametric distribution regression estimators that may be of interest in other contexts as well. We also derive uniform inference results for transition matrices that allow researchers to account for issues such as multiple testing that naturally arise when estimating a transition matrix. We use our results to study differences in intergenerational mobility for black families and white families. In the application, we document large differences between the transition matrices of black

and white families. We also show that these differences are partially, but not fully, explained by differences in the distributions of other family characteristics.

- 2. Decomposing Wage Gaps between Han and Non-Han Minorities
- 3. Semiparametric Estimation of Rank-Rank slope

## Working in Progress

- 1. Transition Functions with an Application on Intergenerational Mobility (with Brantly Callaway and Weige Huang)
- 2. Semiparametric Distribution Regression
- 3. Direct and Indirect Effects in Transition Matrices (with Brantly Callaway, Emmanuel Selorm Tsyawo, Weige Huang)
- 4. What Causes Differences in PM2.5 Concentration in China? Structures Are More Important (with Weige Huang)
- 5. What Factors Are More Likely To Influence PM2.5: Based On Bayesian Model Averaging (with Xufeng Cui, Weige Huang )
- 6. Drivers of PM2.5 in China Based on Machine Learning Approaches (with Weige Huang, Xufeng Cui )
- 7. Portfolio Constructions in Cryptocurrencies (with Weige Huang )

# Teaching

Teaching Assistant: Intermediate Microeconomic Analysis, Macroeconomic Principles, Microeconomic F. Research Assistant for Dr. Brantly Callaway, Fall 2018 - Spring 2019

Research Assistant for Dr. Martin Lopez-Daneri, Fall 2018 & 2019 - Spring 2019 & 2020

## Honors and Fellowships

Research Fellowship, Department of Economics, Summer 2020 Teaching and Research Assistantship, Temple University, Fall 2016 – Spring 2021

## **Softwares**

R, Matlab, Python, Stata, LATEX

# Languages

Chinese (native), English (fluent)

# References

#### Prof. Doug Webber

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#### Prof. Brantly Callaway

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#### Prof. Catherine Maclean

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