# Woosuk Choi

Department of Economics University of Rochester 280 Hutchison Road Rochester, NY +1 (585) 506-1228 woosuk.choi@rochester.edu woosukchoi.github.io Republic of Korea

#### Education

Ph.D. Economics, University of Rochester, 2025 (Expected)

M.A. Economics, University of Rochester, 2021

M.A. Economics, Sungkyunkwan University, Republic of Korea, 2019

B.A. Economics, Sungkyunkwan University, Republic of Korea, 2017

#### Research Interests

Labor Economics, Personnel Economics, Applied Microeconometrics

## Working Papers

"Risk Aversion, Occupation Choice, and Earnings Dynamics" (Job Market Paper)

"College Majors and Earnings Growth", with Josh Kinsler, Alexis Orellana, and Ronni Pavan, *Revise and resubmit, Journal of Labor Economics* 

# Work in Progress

"Labor Market Regulation and Technology Adoption: Evidence from California Nurse Staffing Regulation", with So Young Kim

"Task Heterogeneity and Employer Learning"

# **Teaching Experience**

#### **Teaching Assistance**

Econometrics, University of Rochester, Prof. Ronni Pavan and Prof.Kegon Tan	2021-2023
Research and Communication in Economics, University of Rochester, Dr. Lorentz Ekerdt	2023
Intermediate Microeconomics, University of Rochester, Prof. Elizabeth Ashby	2022
Pricing Analytics, Simon Business School, University of Rochester, Prof. Takeaki Sunada	2022
Mathematical Economics, Sungkyunkwan University, Prof. Yong Gwan Kim	2017-2018
Microeconomics, Sungkyunkwan University, Prof. Yong Gwan Kim	2018
Introduction to Financial Accounting, Sungkyunkwan University, Prof. Kwon-il Choi	2017

# Honors, Awards, Fellowships, and Grants

The Dean's Post-Field Research Dissertation Completion Fellowship, University of Rochester	2024-2025
Tapan Mitra Prize for the Best Fifth-year Empirical Paper, University of Rochester	2024
The Wallis Institute of Political Economy Fellowship, University of Rochester	2022-2023
River Campus Library Data Grant, University of Rochester	2022-2023
Norman M. Kaplan Memorial Prize for the Best Course Record, University of Rochester	2021
Department Graduate Fellowship and Scholarship, University of Rochester	2019-2024
National Humanities/Social Sciences Graduate Research Scholarship, Korean Student Aid Foundation	
Simsan Graduate Fellowship, Sungkyunkwan University	2017
Connected Track Scholarship, Sungkyunkwan University	2017-2018
National Humanities/Social Sciences UnderGraduate Scholarship, Korean Student Aid Foundation	2011-2016

# Presentations and Workshop (\*scheduled)

2024: Midwest Econometrics Group\*, Economic Graduate Student Conference (WashU)\*, Korean Economic Review International Conference, Econometric Society Summer Schools in Dynamic Structural Econometrics

2023: Asian Australasian Society of Labor Economics Conference, Wallis Political Economy Working Group 2019: Western Economic Association International Conference

### **Others**

**Programming:** Julia, Stata, Matlab, Python, R, and LATEX

Language: Korean (Native), English, Japanese

### Reference

Ronni Pavan	Lisa Kahn	John Singleton
Department of Economics	Department of Economics	Department of Economics
University of Rochester	University of Rochester	University of Rochester
280 Hutchison Road	280 Hutchison Road	280 Hutchison Road
Rochester, NY, 14627, USA	Rochester NY, 14627, USA	Rochester NY, 14627, USA
ronni.pavan@rochester.edu	lisa.kahn@rochester.edu	john.singleton@rochester.edu

### Risk Aversion, Occupation Choice, and Earnings Dynamics

(Job Market Paper)

This paper examines the role of risk aversion in shaping occupational choices and earnings distribution. Using hypothetical lottery questions in the NLSY97, I measure individual risk aversion and document that more risk-averse workers earn significantly less, with the gap widening over their careers. I show risk-averse workers are more likely to select occupations with greater earnings stability but lower levels and slower growth of earnings. To identify the causal effect of risk aversion on earnings and to explore the underlying mechanisms, I develop a structural model of occupation choice that accounts for the heterogeneity in risk aversion and human capital accumulation. The model is estimated using the EM algorithm combined with the Conditional Choice Probability estimator, allowing for unobserved heterogeneity in skills and risk aversion. The estimated model reveals substantial differences in the distribution of productivity shocks across occupations. Decomposition analysis attributes approximately 77 percent of the earnings gap between risk attitude groups to occupational sorting driven by risk aversion, with over half explained by differences in human capital accumulation. Using counterfactual simulations, I explore the labor market implications of social insurance that provides earnings floor. The findings indicate that such policies induces risk-averse workers to select into relatively higher-return occupations, resulting in a redistribution of earnings from risk-tolerant to risk-averse workers.

### College Majors and Earnings Growth

(with Josh Kinsler, Alexis Orellana, and Ronni Pavan)

In this paper we estimate major specific earnings profiles using matched American Community Survey (ACS) and Longitudinal Employer-Household Dynamics (LEHD) data. The advantage of the matched data relative to the ACS alone is that it provides a long panel of worker earnings, thus avoiding estimating life cycle profiles using cross- cohort variation. Once we allow the returns to major to vary by cohort, we find that engineering, computer science, and business majors experience faster earnings growth relative to humanities majors. For example, the gap in earnings between technical majors like engineering and computer science and humanities grows by 5-6% between ages 23 and 50. Our estimates also indicate that more recent graduates in these fields earn a larger premium relative to humanities than earlier cohorts.