

Woosuk Choi

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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. Kegan 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	2018
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

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Risk Aversion, Occupation Choice, and Earnings Dynamics

(Job Market Paper)

This paper examines how differences in risk aversion influence occupational choices and the distribution of earnings. I first show that more risk-averse workers earn significantly less, and that this earnings gap widens over time. A key driver of this pattern is that risk-averse individuals tend to select occupations with more stable, but lower, earnings and slower earnings growth. To quantify the importance of this channel and distinguish it from sorting based on unobserved traits, I develop and estimate a structural model of occupation choice that accounts for heterogeneity in risk aversion and human capital accumulation. In the model, risk aversion is correlated with both observed and unobserved initial skills, and it influences skill accumulation through occupational choices. Using the estimated model, I perform decomposition analysis showing that 64 percent of the earnings gap between the most and least risk-averse workers (14 log points) can be explained by occupation choices. Of this, approximately 79 percent is due to lower pay in safer occupations, while the remaining 21 percent is attributable to slower human capital accumulation. In counterfactual analysis, I find social insurance providing an earnings floor allows risk-averse workers to select into relatively higher-return occupations, thereby reducing the earnings gap between risk-tolerant and risk-averse workers by around 21 percent (3 log points).

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.