Huan Wu

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Education

University of North Carolina at Chapel Hill   2020 – 2026 (Expected)
Ph.D. in Economics

   - Committee: Désiré Kédagni (chair), Andrii Babii, Jacob Kohlhepp, Adam Rosen, Valentin Verdier

Duke University   2018 – 2020
M.A. in Economics

Southwestern University of Finance and Economics (SWUFE)   2014 – 2018
B.A. in Economics and Finance

Fields on Interest

Econometrics, Causal Inference, Microeconometrics, Spillover Effects

Research

Job Market Paper

"Unobserved Heterogeneous Spillover Effects in Instrumental Variable Models"

This paper develops a general framework for identifying causal effects in settings with spillovers, where both outcomes and endogenous treatment decisions are influenced by peers within a known group. It introduces *the generalized local average controlled spillover and direct effects*, which extend the local average treatment effect framework to spillover settings and establish general conditions for their point identification. These conditions formally justify the use of commonly imposed restrictions, such as one-sided noncompliance, to achieve point identification with binary instruments in related studies. The paper then defines *the marginal controlled spillover and direct effects*, which naturally extend the marginal treatment effect framework spillover settings and are nonparametrically point identified from continuous instrumental variation. These marginal effects serve as building blocks for a broad class of policy-relevant treatment effects, including some casual spillover parameters in the related work. The paper develops semiparametric estimators and establishes their asymptotic properties, and further proposes a parametric approach for practical implementation. An application using Add Health data reveals heterogeneity in educational spillovers within best-friend networks.

Working Papers

"Robust Identification in Randomized Experiments with Noncompliance" with Désiré Kédagni and Yi Cui, 2025. *Revise and resubmit, Journal of Applied Econometrics.*

"Testing Identifying Assumptions in Parametric Separable Models: A Conditional Moment Inequality Approach" with Leonard Goff and Désiré Kédagni, 2024. *Reject and resubmit, Econometrics Journal.*

Working in Progress

"Relaxing Identifying Assumptions in Triangular Model"

"Identifying One-way Spillover Effects in Randomized Experiments" with Désiré Kédagni

"Treatment Effects with a Misreported Outcome" with Désiré Kédagni

Conferences and Seminars

2025: SEA Annual Meeting (scheduled), Econometric Society World Congress, Triangle Econometrics Conference, Econometrics Workshop (UNC-CH), Microeconometrics Breakfast Seminar (Duke)

2024: SEA Annual Meeting, Midwest Econometrics Group, Econometrics Workshop (UNC-CH), Causal Inference Reading Group (UNC-CH)

2022 - 2023: Econometrics Workshop (UNC-CH)

Teaching Experience

Instructor
- Introduction to Economics (Econ 101)   Summer 2022

Teaching Assistant
- Introduction to Data Science and Econometrics (Econ 400)   Fall 2023, Summer 2024, Fall 2025
- Introduction to Economics (Econ 101)   Fall 2022, Spring 2024, Spring 2025
- Econometrics (Econ 470)   Fall 2024
- Intermediate Macroeconomics (Econ 420)   Summer 2023
- Advanced Econometrics (Econ 571)   Spring 2023
- Game Theory (Econ 411)   Spring 2023
- Applied microeconomics in health care and other topics (Econ 590)   Spring 2021, Spring 2022
- Financial Markets and Economic Fluctuations (Econ 423)   Spring 2022
- Intermediate Microeconomics (Econ 410)   Fall 2021
- The Economics of Entrepreneurship and Innovation (Econ 111)   Fall 2020

Grants, Honors & Awards

- Department Teaching Assistantship, UNC Economics Department   2020 – 2026
- Graduate Student Parke Award, UNC Economics Department   2025
- M.A. Merit Scholar Award, Duke University   2019
- Outstanding Graduates, SWUFE   2018
- Academic Scholarship, SWUFE   2014 - 2018
- The second prize in the 5th Econometrics Thesis Competition, SWUFE   2017
- Innovative Entrepreneurship Scholarship, SWUFE   2016

Referee Service

Journal of the American Statistical Association, Journal of the Royal Statistical Society: Series A

Skills

- Programming: Matlab, R, Stata, Python, SQL
- Languages: English (fluent), Chinese (native)

References

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Associate Professor of Economics
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