

Huan Wu

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Education

University of North Carolina at Chapel Hill
Ph.D. in Economics

2020 – 2026 (Expected)

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

Duke University
M.A. in Economics

2018 – 2020

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

2014 – 2018

Fields on Interest

Econometrics, Causal Inference, Microeconometrics, Spillover Effects, Partial Identification

Research

Job Market Paper

"Unobserved Heterogeneous Spillover Effects in Instrumental Variable Models"

This paper develops a novel framework for identifying and estimating causal effects in settings with spillovers within known groups. I introduce two new causal parameters: the marginal controlled spillover effect, capturing the impact of peers' treatments while holding individual's own treatment fixed, and the marginal controlled direct effect, capturing the impact of an individual's own treatment while holding peers' treatments fixed. I point identify these effects using continuous instruments, allowing for flexible spillover structures and arbitrary correlation in unobservables. These marginal effects provide building blocks for policy-relevant parameters, including local average direct and spillover effects. I propose semiparametric estimators with established asymptotic properties and complement them with a practical parametric approach and bootstrap inference. Monte Carlo simulations confirm the superior finite-sample performance of the parametric method. An application to the National Longitudinal Study of Adolescent to Adult Health (Add Health) data on best-friend groups reveals distinct patterns in educational spillover effects that vary with the characteristics of best-friend networks.

Working Papers

"Testing Identifying Assumptions in Parametric Separable Models: A Conditional Moment Inequality Approach" with Leonard Goff and Désiré Kédagni, 2024

"Robust Identification in Randomized Experiments with Noncompliance" with Désiré Kédagni and Yi Cui, 2025

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

Skills

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

References

Désiré Kédagni

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UNC-Chapel Hill
Department of Economics
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Adam Rosen

Professor of Economics
Duke University
Department of Economics
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Jacob Kohlhepp

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Valentin Verdier

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