

Wei Wang

Department of Agricultural, Environmental, and Development Economics | The Ohio State University
2120 Fyffe Road, Columbus, OH 43210 | wang.16091@osu.edu | (+1) 614-589-9657 | [weiwang-econ.github.io](https://github.com/weiwang-econ)

EDUCATION

The Ohio State University	Columbus, OH
Ph.D. in Agricultural, Environmental, and Development Economics	Aug. 2022 – May 2027 (expected)
Advisor: Yongyang Cai	
Xiamen University	Xiamen, China
M.S. in Quantitative Economics	Sep. 2017 – Jun. 2020
Jiangxi University of Finance and Economics	Nanchang, China
B.S. in Mathematical Economics	Sep. 2013 – Jul. 2017

RESEARCH FIELDS AND METHODS

Primary Fields: Environmental and Energy Economics; Climate Economics; International Trade

Additional Fields: Food and Applied Behavioral Economics; Nonmarket Valuation

Methods: Dynamic Integrated Assessment Modeling; Quantitative General Equilibrium Modeling;
Applied Econometrics; Discrete Choice Experiments

JOB MARKET PAPER

“Agricultural Trade Frictions, Climate Adaptation, and Mitigation.”

Abstract: Agricultural trade is widely considered as a key margin of climate adaptation, as it allows regions facing large climate damages to agriculture to substitute imports for domestic production. However, this view abstracts from an important feedback effect: the reallocation will change regions’ incentive to mitigate. I establish this mechanism analytically, then quantify it in a multi-region integrated assessment model, calibrated to 13 regions, in which trade, structural change, and regional climate policy are jointly endogenous. The results show that this feedback is quantitatively important. Holding the temperature path fixed, all 12 regions that suffer net climate losses gain from eliminating agricultural trade frictions; however, once emissions, temperature, and mitigation policy respond endogenously, only five do. Regions that shift further out of agriculture cut their optimal carbon taxes by more, then cumulative global emissions through 2100 rise by 4.50 percent. The pattern reflects an asymmetry: adaptation is local, but mitigation has global effect, so lower climate exposure reduces a region’s local return of mitigation but not its global value. Agricultural trade liberalization therefore cannot be evaluated separately from the climate policy it induces.

PUBLICATIONS AND ACCEPTED PAPERS

- “Evaluating the Optimal Air Pollution Reduction Rate: Evidence from the Transmission Mechanism of Air Pollution Effects on Public Subjective Well-Being.” (Corresponding author; with Chuanwang Sun, Xiangyu Yi, Tiemeng Ma, and Weiyi Cai). *Energy Policy*, 2022.
- “Expanding Firms’ Innovation Boundaries: The Role of Suppliers’ Breakthrough Green Innovation and Digitalization.” (with Mingming Zhao, Fuxiang Wu, and Xia Xu). *IEEE Transactions on Engineering Management*, accepted.

WORKING PAPERS

- “The Long-Term Effects of the EU Carbon Border Adjustment Mechanism.” (with Yongyang Cai).
- “Solar Tariffs and the Energy Transition: Clean-Investment Dynamics and Climate Policy Responses in the Global Economy.”
- “Rising Temperatures, Structural Transformation, and Within-Country Wage Inequality.”
- “Throw a Bunch Away: A Bundled Utility Maximization Framework Modeling Multiple-Item Food Discarding.” (with Wuyang Hu, Xiaolei Li, Jian Li, and Ping Qing).

WORK IN PROGRESS

- “Non-Cooperative Climate Policy in a Dynamic Trade IAM.” (with Yongyang Cai).
- “Capital Flows and Optimal Climate Policies.” (with Jingke Wu, Xufeng Liu, and Yongyang Cai).

CONFERENCE AND WORKSHOP PRESENTATIONS

Agricultural and Applied Economics Association Annual Meeting	2026
AERE@WEAI Annual Conference	2026
Berkeley/Sloan Summer School in Environmental and Energy Economics	2025
Southern Agricultural Economics Association Annual Meeting	2025
NAREA Scholars' Circle	2024

RESEARCH EXPERIENCE

Graduate Research Assistant, The Ohio State University Spring 2025 – Summer 2025
ERS-funded research on the EU Carbon Border Adjustment Mechanism; supervisor: Yongyang Cai

TEACHING EXPERIENCE

Lab Instructor , The Ohio State University	
Advanced Quantitative Methods I	Autumn 2025
Student Evaluation of Instruction: 4.9/5 .	
Advanced Quantitative Methods II	Autumn 2025
Student Evaluation of Instruction: 4.9/5 .	
Teaching Associate , The Ohio State University	
Principles of Food and Resource Microeconomics	Spring 2026
Energy, the Environment, and the Economy	Autumn 2024
Economics of Public Policy Analysis	Spring 2024
Strategic Management	Autumn 2022 and Autumn 2023

AWARDS AND GRANTS

Berkeley/Sloan Summer School Travel Grant	2025
AEDE Travel Grant, The Ohio State University	2025 – 2026
First Prize, China National College Students Competition on Energy Economics	2018
Outstanding Graduate Award, Jiangxi University of Finance and Economics	2017
National Scholarship, Ministry of Education of China	2016

PROFESSIONAL SERVICE

Conference Discussant, AERE@WEAI Annual Conference

2026

SKILLS AND LANGUAGES

Software: GAMS, MATLAB, Julia, Stata, R, Python, ArcGIS, L^AT_EX

Languages: English (fluent), Chinese (native)

CANDIDACY EXAMINATION COMMITTEE

Yongyang Cai

Advisor and Committee Chair

Professor

Department of Agricultural, Environmental, and
Development Economics

The Ohio State University

cai.619@osu.edu

Wuyang Hu

Committee Member

Professor

Department of Agricultural, Environmental, and
Development Economics

The Ohio State University

hu.1851@osu.edu

Ian Sheldon

Committee Member

Professor

Department of Agricultural, Environmental, and
Development Economics

The Ohio State University

sheldon.1@osu.edu

Brent Sohngen

Committee Member

Professor

Department of Agricultural, Environmental, and
Development Economics

The Ohio State University

sohngen.1@osu.edu