

# Weiting Miao (繆炜婷)

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## Education

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### Duke University, Durham, USA

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|---|------------------------|
| Ph.D., Economics                            | 2019 – 2025 (expected) |
| M.S., Statistics (concurrent, GPA: 4.0/4.0) | 2019 – 2025 (expected) |
| M.A., Economics (terminal, GPA: 4.0/4.0)    | 2017 – 2018            |

### Central University of Finance and Economics (CUFE), Beijing, China

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|---------------------------------|-------------|
| B.A., Economics (GPA: 90.8/100) | 2013 – 2017 |
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## Research Fields

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**Primary:** International Trade, Firm Dynamics

**Secondary:** Industrial Organization, Macroeconomics

## Working Papers

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*Technology Rivalry and Resilience Under Trade Disruptions: The Case of Semiconductor Foundries*  
(Job Market Paper)

This paper studies the impact of industrial policies on technology competition and consumer welfare amid rising global trade disruption risks. Distilling key empirical features from novel data on the semiconductor foundry industry, I develop and estimate a dynamic oligopoly model that integrates step-by-step innovation, trade disruption risk, and industrial policies. While distortions from market power and technological externalities justify subsidies, their optimal levels depend on the magnitude of trade disruption risk: when the risk is low, the optimal subsidy rate remains low, as the welfare benefits are distributed globally, but the costs are borne exclusively by the subsidizing government. My quantitative model shows that a 35% trade disruption risk makes the 25% investment subsidy under the US CHIPS Act optimal, resulting in a 6% welfare improvement for the U.S. The paper also analyzes the CHIPS Act's restrictions on investments in rival countries, intended to secure technological leadership against their firms. Its efficacy depends on the strength of technology spillover restrictions and the scale of the rival home market secured for rival firms.

*The Geographical Leakage of Environmental Regulation: Evidence from the Clean Air Act* (with Mark Curtis, Felix Samy Soliman, Juan Carlos Suárez Serrato, and Daniel Yi Xu)

## Work in Progress

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*R&D, Innovation, and Productivity* (with Matthias Kehrig and Daniel Yi Xu)

*Two Tales of Innovation and Nascent Acquisitions*

*Labor Share Decline in Chinese Industrial Sector*

## Research Experience

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2018 – present      RA for Daniel Yi Xu, Duke  
2021 – 2023        RA for Matthias Kehrig, Duke  
2017 – 2018        RA for Attila Ambrus, Duke  
2016 – 2017        RA at Case Center, Cheung Kong Graduate School of Business

## Teaching Experience

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2020 Fall            TA for Craig Burnside and Francesco Bianchi, Macroeconomics I (Ph.D. core), Duke  
2021 Spring        TA for Cosmin Ilut and Andrea Lanteri, Macroeconomics II (Ph.D. core), Duke

## Awards and Fellowships

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2024 Summer        AEA Summer Fellow, Federal Reserve Bank of Dallas  
2022, 2023 Summer    Department of Economics Summer Research Fellowship, Duke  
2020, 2021 Summer    Graduate School Summer Research Fellowship, Duke  
2019-2020            Economics Department Graduate Fellowship, Duke  
2019                    Master's Program Award for Academic Excellence, Duke  
2018 Spring, 2018 Fall    M.A. Merit Scholarship, Duke  
2016, 2017            Scholarship of Academic Merit, CUFU  
2015, 2016, 2017        Academic Excellence Award, CUFU

## Presentations and Workshops

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2024      Duke (Trade & IO & Macro), Triangle Micro Conference (UNC), Federal Reserve Bank of Dallas  
2023      Duke (Trade & Macro)  
2022      Duke (IO & Macro), NBER Entrepreneurship Research Boot Camp

## Other Information

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Programming: Julia, Python, MATLAB, Stata, R, Mathematica,  $\LaTeX$

Languages: English (fluent), Mandarin (native), Cantonese (intermediate)

Security Clearance: U.S. Census Bureau Special Sworn Status

## References

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### **Daniel Yi Xu (Chair)**

Professor of Economics

Duke University

✉ [daniel.xu@duke.edu](mailto:daniel.xu@duke.edu)

### **Matthias Kehrig**

Associate Professor of Economics

Duke University

✉ [matthias.kehrig@duke.edu](mailto:matthias.kehrig@duke.edu)

### **Kei-Mu Yi**

M. D. Anderson Chair in Economics

University of Houston

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### **Laura Castillo-Martinez**

Assistant Professor of Economics

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