

Barron Tsai

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Education

Ph.D. in Economics, Duke University

Aug 2020 – May 2026
(expected)

- Advisors: Rafael Dix-Carneiro, Daniel Yi Xu, Laura Castillo-Martinez, Federico Huneus, Matthias Kehrig

MPhil in Economics, HKUST

Sep 2018 – Jun 2020

BBA in Global Business, Economics, HKUST

Sep 2014 – Jun 2018

Research Fields

Primary: Trade

Secondary: Industrial Organization, Macroeconomics

Working Papers

When Cutting Out the Middleman Backfires: Disintermediation, Wholesale Markups, and Misallocation

Job Market Paper

- I study the welfare implications of technology-induced disintermediation using a production network model with endogenous intermediation, wholesaler entry and exit, and markups. Wholesalers economize on the search costs of forming buyer-supplier relationships, but as direct trade technology improves, demand for intermediation falls: marginal wholesalers exit, survivors gain market share, and markups rise. These higher markups distort relative input prices and misallocate resources, partially offsetting the gains from disintermediation. I test the model's predictions using Turkish firm-to-firm transactions, exploiting the staggered rollout of fiber internet. Consistent with theory, provinces with faster fiber growth see less intermediated trade, fewer wholesalers, and higher wholesale markups. Calibrating the model to these responses, endogenous markup increases reduce welfare gains from fiber-induced disintermediation by 30%. The results demonstrate that technologies enabling firms to bypass intermediaries can generate unintended efficiency losses by consolidating wholesale market power, highlighting the potential role for complementary competition policy.

Work in Progress

Internal Trade Barrier and Spatial Misallocation

- I study how reductions in internal trade costs, driven by the rollout of fiber internet across Turkish provinces, reshape product-market competition and aggregate efficiency. First, I document a pro-competitive effect: provinces experiencing faster fiber rollout saw a relative decline in aggregate manufacturing markup, with markedly larger declines in sectors that are more tradable. Second, I develop a spatial extension of Atkeson–Burstein that embeds sectoral heterogeneity in tradability and internal migration. The model quantifies welfare changes that operate through two opposing forces. On the one hand, falling internal trade costs reduce aggregate markups and within-province markup dispersion. On the other hand, uneven infrastructure development can widen markup dispersion across provinces, misallocating workers toward low-markup provinces and dampening the aggregate gains. The net effect hinges on the initial spatial distribution of markups and on each province's comparative advantage in more versus less tradable sectors. These findings provide a rationale for place-based policy aimed at correcting spatial distortions due to product-market power. The potential for uneven infrastructure development to worsen aggregate efficiency provides a rationale for a more balanced approach to development within a country.

Optimal Tariffs with Granular Importers

- When a few large importers internalize terms-of-trade effects, the standard optimal-tariff motive shrinks. Unlike granular seller power (Gaubert and Itskhoki, 2021), granular buyer power can eliminate the rationale for tariffs. This creates a complementarity between antitrust and trade policy: reducing importer concentration raises the optimal tariff by weakening private internalization of the terms-of-trade effect.

Research and Work Experience

Ph.D. Graduate Assistant, Duke University

- Research Assistant to Prof. Laura Castillo-Martinez (Fall 2022 – Spring 2024)
- Research Assistant to Prof. Federico Huneeus (Fall 2023)

Durham, NC
Aug 2022 – May 2024

Part-time Research Assistant, HKUST

- Research Assistant to Prof. Edwin Lai

Hong Kong
Jun 2017 – Sep 2018

Research Intern, Chartwell Capital

Hong Kong
Jun 2017 – Aug 2017

Teaching Experience

Teaching Assistant, Duke University

- Macroeconomic Analysis I (PhD); Instructor: Prof. Craig Burnside, Prof. Cosmin Ilut; Fall 2021
- Macroeconomic Analysis II (PhD); Instructor: Prof. Andrea Lanteri, Prof. Kyle Jurado; Spring 2022
- Economics Principles (Head TA; UG); Instructor: Prof. Thomas Nechyba; Fall 2024, Fall 2025
- Intermediate Macroeconomics (UG); Instructor: Prof. Matthias Kehrig; Spring 2025

Durham, NC
Sep 2021 – Present

Teaching Assistant, HKUST

- Economic Development and Growth (UG); Instructor: Professor Sujata Visaria; Fall 2018
- Environmental Economics (PG); Instructor: Professor Yatang Lin; Spring 2019

Hong Kong
Sep 2018 – Jun 2019

Awards and Fellowships

- Summer Research Fellowship, Duke University
- Academic Achievement Medal, HKUST
- Academic Excellence Award, HKUST
- Fung Scholarship
- Arnhold & Co., Ltd. Scholarship
- University Admission Scholarship, HKUST

Skills

Programming: Julia, Matlab, Python, Stata, R, ArcGIS

Language: English (Fluent), Cantonese (Native), Mandarin (Fluent)

References

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Daniel Yi Xu

David Rubenstein Distinguished Professor of Economics

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