

Yiran Cao (Carol)

China, Hong Kong SAR, Tuen Mun, 8 Castle Peak Road, Department of Economics, Lingnan University.	Born: Tel.: Email: Personal website:	30.04.1995 +86 14714310663 / +852 63502904 yiranco@ln.hk https://yirancaohk.github.io/
---	---	---



Education

Lingnan University, Hong Kong

Ph.D., Economics.

2019 - 2022

Thesis title: **Essays on the Effects of Mergers on Competition.**

Outstanding Thesis

Supervisors: Ping Lin (Chief), Tianle Zhang.

M.Sc. in International Banking and Finance.

2018 - 2019

Shandong Normal University, China

B.A. in Economics.

2013 - 2017

Experience

Research Fellow, Lingnan University, Hong Kong.

2023.10 - to present

Postdoctoral Fellow, Lingnan University, Hong Kong.

2022.10 - 2023.10

- Supervisor: Tianle Zhang

Research

Research Interests

Industrial organisation, Competition policy.

Working Papers

- Search and Competition in Expert Markets. (with Yongmin Chen, Yucheng Ding, Tianle Zhang), working paper, 2022, R&R, *RAND Journal of Economics*.
- Partial Vertical Integration, and Market Foreclosure. (with Ping Lin), working paper, 2022
- Upstream Killer Acquisitions and Market Structure. (with Ping Lin and Tianle Zhang), working paper, 2023.
- Killer Acquisitions: Competition Test and Remedies. (with Ping Lin), working paper, 2023.

Work in Progress

- Patterns of Competitive Interaction with Consumer Search.

Teaching

Instructor, Lingnan University:

- Behavioural Economics (Undergraduate level) 2022 Fall
- Intermediate Microeconomics (Undergraduate level) 2023 Summer

Teaching Assistant, Lingnan University:

- Tools for Economic Analysis (Undergraduate level) 2020 Spring

Presentations

- 2023: Brownbag seminars, Lingnan University.
- 2023: CRESSE-Lingnan International Conference on Competition Policy
- 2023: The First Lingnan-Shanda Workshop on Industrial Economics and Competition Policy.
- 2022: The Second International Conference on Antitrust Theory and Practice of Shandong University.
- 2022: Brownbag seminars, Lingnan University.
- 2020: Brownbag seminars, Lingnan University.

Skills

Tools

Mathematica, Stata, Python, Latex, Github.

Languages

Mandarin Chinese (Native), English (Fluent), Cantonese (Elementary).

Honors and Awards

- Outstanding PhD thesis. 2022
- Outstanding Performance Scholarship. 2018
- Outstanding Graduate of Shandong. 2017

Abstract of Working Papers

“Search and Competition in Expert Markets.”

with Yongmin Chen, Yucheng Ding, and Tianle Zhang. (*R&R at Rand Journal of Economics*)

We develop a model in which consumers sequentially search experts for recommendations and prices to treat a problem, and experts simultaneously compete in these two dimensions. Consumers have either zero or a positive search cost. In equilibrium, experts may “cheat” by recommending an unnecessary treatment with positive probabilities, prices follow distributions that depend on a consumer’s problem type and the treatment, and consumers search with Bayesian belief updating about their problem types. Remarkably, as search cost decreases, both expert cheating and prices can increase stochastically. However, if search cost is sufficiently small, competition will force all experts to behave honestly.

“Upstream Killer Acquisitions and Market Structure”

with Ping Lin, and Tianle Zhang.

Incumbent firms may acquire start-ups to eliminate potential competition without intending to develop new technology (killer acquisitions). We develop a model to examine the incentives and welfare implications of killer acquisitions under different market structures: vertical separation and integration. Our model focuses on the competition between an incumbent upstream firm and a startup with the potential to develop superior technology, where the incumbent has the option to acquire the startup and decide whether to pursue the superior technology. We find that killer acquisitions are more likely when the cost of developing the superior technology is moderate under both vertical separation and vertical integration. However, these acquisitions lead to a welfare loss only when the development cost is relatively low. Comparing vertical integration and separation, the probability of killer acquisition is higher (lower) when the incumbent firm has a greater (smaller) chance of successfully developing the superior technology.

“Killer Acquisitions: Competition Test and Remedies.”

with Ping Lin.

Killer acquisitions have become a big competition concern globally recently. We establish a “synergy effect test” for evaluating the competitive impact of start-up acquisitions. An acquisition is welfare-enhancing if and only if the level of synergy effect exceeds a threshold which is proportionate to the unilateral effect in the post-R&D product market. A Commit-to-Continue remedy can effectively eliminate KA transactions, while a product-line divestiture remedy can eradicate welfare-reducing non-KA transactions. We also consider voluntary divestitures by the acquiring firm in a Cournot setting. We show that KA is considerably less likely to occur due to a reversed merger paradox effect.

“Partial Vertical Integration, and Market Foreclosure.”

with Ping Lin.

This paper investigates whether a partial vertical merger results in market foreclosure, and how the integrating firm’s foreclosure strategy affects consumer welfare, in a successive duopoly setting. The result suggests that the magnitude of partial ownership shares has a significant impact on the integrated firm’s incentive in foreclosing competitors. The integrated upstream firm, in particular, chooses input foreclosure if and only if the ownership stake is significant enough, and the integrated downstream firm executes customer foreclosure if and only if the ownership stake is intermediate. Furthermore, consumers benefit the most when the ownership share is intermediate.

References

Tianle Zhang
Professor of Economics
Department of Economics
Lingnan University
tianlezhang@ln.edu.hk

Ping Lin
Chair Professor of Economics
School of Economics
Shandong University
plin@sdu.edu.cn

Yongmin Chen
Professor of Economics
Department of Economics
University of Colorado Boulder
yongmin.chen@colorado.edu

Last updated in November, 2023