Xiaoyan Zhuang

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Education

The Pennsylvania State University 2021–2027 (expected)
Ph.D. Candidate in Economics

Hong Kong University of Science and Technology (HKUST) 2016–2020
B.Sc. in Mathematics and Economics

Fields of Specialization

Primary: Industrial Organization, Applied Microeconomics
Secondary: Transportation Economics

Job Market Paper

Alliance Capacity Sharing and Market Congestion in Container Shipping
with Anhua Chen

This paper studies how alliance capacity sharing affects long-term contracting, vessel availability, and industry carrier surplus in container shipping. Carriers lease vessels via contracting subject to uncertain cargo demand. Alliance carriers can share capacity among members, which reduces their idle-capacity risk and encourages long-term contracting. These long-term commitments reduce vessel availability and create congestion externalities borne by non-alliance carriers. I develop and estimate a dynamic model in which carriers choose contract duration under demand uncertainty and search frictions. The estimates imply that capacity sharing absorbs 34.7% of otherwise idle capacity. Capacity sharing generates substantial production gains for alliance carriers but reduces non-alliance carriers' surplus by approximately $1.2 billion annually. These losses offset about one-quarter of alliance gains, leaving a net increase in industry carrier surplus of 3.24%.

Teaching Experience

Teaching Assistant, The Pennsylvania State University
PhD Industrial Organization Fall 2024
Undergraduate Public Economics Summer 2022

Work Experience

HSBC Markets and Securities Services, Hong Kong, *Market Analyst* 2021

UBS Global Wealth Management, Chief Investment Office, Hong Kong, *Research Analyst* 2020–2021

Additional Experience

Research Assistant, The Pennsylvania State University 2026, 2023
Academic Exchange, Columbia University 2019

Seminar Presentations

Penn State University, Applied Micro Seminar 2026

Honors and Awards

First Class Honors, HKUST 2020
Epsilon Fund Award, Department of Mathematics, HKUST 2018–2019

Computational Skills

Programming: Python, Julia, Stata, MATLAB
Tools: Git/GitHub, LaTeX, Linux, Excel/VBA

References

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