Yinqi Zhang

yinqizhang@crai.com • http://yinqizhang.com

Employment

Senior Associate, Charles River Associates (CRA) 2024–Present
Assistant Professor, University of International Business and Economics (UIBE) 2021–2024

Education

Ph.D. in Economics, University of Southern California (USC) 2015–2021
M.A. in Economics, USC 2015–2017
Master of Public Policy, USC 2012–2014
B.A. in Management, UIBE 2008–2012

Research Fields

Industrial Organization, Microeconomic Theory, Economic Networks

Papers

1. "The Heterogeneous Effects of Airline Joint Ventures on Connecting Markets," (with Guofu Tan)
Abstract: We study the impact of a joint venture (JV) on connecting markets in the international airline industry. Our theoretical analyses show that a JV mostly reduces the prices of codeshare itineraries (i.e., itineraries that combine flights offered by different carriers) by eliminating double marginalization and increases the prices of online itineraries (i.e., itineraries operated by the same carrier) offered by one or both of the JV partners in the same market. These effects also depend on the network of complements and substitutes in a market. Since all itineraries, which may combine multiple carriers' flights, are substitutes for each other, the JV has incentives to raise the prices of online itineraries to divert consumers toward codeshare itineraries with eliminated double margins, which may partially offset the price reductions in codeshare itineraries. In a network where both JV partners have online itineraries, the JV can also eliminate the competition between the partners, further enhancing the price increases in online itineraries and offsetting the price decreases in codeshare itineraries. By studying the JV between Aeromexico and Delta Air Lines, we empirically evaluate the JV's impact on itineraries in markets with different networks. Our findings are consistent with our theoretical predictions, providing new evidence about the heterogeneous effects of a JV on connecting markets. Some conditions to identify the markets where a JV tends to reduce consumer surplus are also discussed.

2. "Competition with Complements and Substitutes"
Abstract: We study price competition in a network setting where final products combine intermediate products supplied by (possibly) different multiproduct firms. Consumers' choices of final products follow a general demand system nesting CES and logit demands. Building on a generalized nested fixed-point argument, we develop a partially aggregative games approach to prove equilibrium existence. We then characterize equilibrium prices, profits, and consumer surplus, and provide equilibrium uniqueness conditions. Our comparative statics results illustrate two implications. Unlike in markets with pure substitutes, firm entry can raise incumbent profits and existing prices. Even under logit demand, a cost-reducing merger between suppliers of complementary products can harm consumers, but only in networks

with two complementary firms, each also supplying a final product the other does not.

3. "Competitive Effects of Joint Ventures in the International Airline Industry," (with Guofu Tan), *Transportation Research Record*, 2022, Vol. 2676, No. 2, pp. 59–68.

Abstract: In the past two decades, many international airline carriers have expanded their cooperation by forming various joint ventures (JVs). One key feature of these JVs is that they require carriers to determine certain airfares jointly and integrate their operations as a single carrier in the market for international air travel. This paper tries to evaluate the impact of JVs on airfares. The focus is on a set of behind-to-gateway markets between a non-gateway U.S. city and a foreign gateway city, where both online and codeshare flights are offered, to study how the airfares of online flights are affected after carriers form JVs. A new hypothesis is discussed that JVs increase the airfares of online flights. Based on this hypothesis, an empirical model is built to evaluate the Oneworld alliance's transatlantic JV established in July 2010. This empirical analysis, which uses the U.S. Department of Transportation (U.S. DOT)'s Airline Origin and Destination Survey (DB1B) international data from 2008 to 2013, indicates that the Oneworld transatlantic JV increased airfares of online flights by about 3%–4% in the behind-to-gateway markets. Previous studies, which emphasized the airfare reductions of codeshare flights in the connecting markets, may have overestimated the benefits to consumers from JVs. U.S. DOT can better protect consumers by evaluating plausible airfare increases in online flights in the behind-to-gateway markets when reviewing new applications for JVs.

Research in Progress

1. "An Analysis of International Airline Alliances and Joint Ventures"

2. "Airline Joint Ventures in Markets where Complementors are also Competitors," (with Guofu Tan)

Teaching Experience

Instructor

Econ 101: Principles of Microeconomics, UIBE	Fall 2023
Econ 101: Principles of Microeconomics, UIBE	Fall 2022
Econ 201: Principles of Macroeconomics, UIBE	Fall 2022

Teaching Assistant

Econ 203: Principles of Microeconomics, USC	Spring 2019, Fall 2020 & Spring 2021
Econ 205: Principles of Macroeconomics, USC	Spring & Fall 2018
Econ 305: Intermediate Macroeconomic Theory, USC	Fall 2016, Spring & Fall 2017
PPD 557: Modeling and Operations Research, USC	Fall 2013 & Spring 2014

Seminar and Conference Presentations

Twenty-First Annual Berkeley – Columbia – Duke – MIT – Northwestern IO Theory Conference	2024
Hunan University	2024
University of Rochester	2024
Compass Lexecon	2024
Fudan University	2023
Asia Pacific Industrial Organization Conference	2023

UIBE Workshop on Industrial Organization	2023
CRESSE-SDU International Conference	2023
Shandong University	2023
International Industrial Organization Conference	2023
CRA	2023
Fudan University	2022
UIBE	2022
UIBE Workshop on Industrial Organization	2021
Asia Pacific Industrial Organization Conference	2021
Transportation Research Board Annual Meeting	2021
USC Theory Seminar	2020
International Industrial Organization Conference (Canceled)	2020
Western Economic Association International	2020
USC Price School of Public Policy	2019
Western Economic Association International	2019

Professional Experience

1. Provided economic analyses for an antitrust agency in assessing the competitive effects of a proposed joint venture in the international airline markets.
2. Conducted economic analyses of an account rental/trading problem on behalf of the Chinese gaming platform Tencent.
3. Provided research assistance for several antitrust cases involving multiproduct firms, the violation of intellectual property rights, and exclusive territory contracts under the guidance of Prof. Guofu Tan.
4. Developed practical guidelines and policy recommendations for regulating abusive conduct for China's antitrust agencies.

Fellowships & Awards

Airport Cooperative Research Program Graduate Research Award, the Federal Aviation Administration of the U.S. DOT	2019–2021
Graduate School Summer Research and Writing Grant, USC	2019
Summer Research Award, USC	2017, 2018
Dornsife College Graduate Merit Fellowship, USC	2015–2021

Other Information

Languages: Mandarin (native), Cantonese (native), English (fluent)
Programming Skills: Stata, Matlab, R, Mathematica