Qi Zhang

Department of Economics
149 Elson Hall
University of Virginia
Charlottesville, VA 22908

Phone: 781-827-1647
Email: qz4vg@virginia.edu
Website: qizhangecon.github.io

EDUCATION

Ph.D. in Economics	University of Virginia	May 2026 (expected)
M.S. in Economics	Tufts University	May 2020
B.S. in Labor Economics & Social Security	Zhejiang University	May 2018

RESEARCH INTERESTS

Applied Microeconomics, International Trade

WORKING PAPERS

Pollution Haven Next Door: Evidence from China

Job Market Paper   Link

Abstract: While existing studies on the Pollution Haven Hypothesis (PHH) find limited empirical support at the national level, fewer have examined it at a more granular spatial scale. This paper revisits the PHH by investigating the effects of the Key Cities Air Pollution Control (KCAPC) policy, a regional air quality program in China. Using a synthetic difference-in-differences (SDID) design to address non-random selection in treated cities, I analyze how the policy affects both SO_2 outcomes and industrial composition across cities. The findings support the PHH at the regional level: Treated cities shift the source of pollution toward less pollution-intensive sectors, while neighboring cities experience growth in output and capital in pollution-intensive sectors. Further evidence suggests that these patterns are partly explained by strategic production reallocation by local governments via state-owned enterprises (SOEs), as well as firm-level shifts toward cleaner product lines. These findings underscore the importance of spatial context in evaluating environmental regulation and highlight how well-intentioned policies can reshape regional industrial structure in unintended ways.

First in Use, First in Right, First in Productivity? The Empirics of Prior Appropriation in Colorado

Peter Debaere, Tianshu Li, **Qi Zhang**, *Mesfin Mekonnen, Swatantra Sharma*

Abstract: Prior appropriation is a water rights system that privileges water access by seniority. With microdata for diverting structures in a large sub-basin of the water-stressed Colorado River, we study whether water users' agricultural productivity increases with seniority, and whether prior appropriation as a water rights system allocates water efficiently. For 2013-2022 we investigate how productivity interacts with the decision of prior appropriation's marginal users to withdraw water in excess of their water right whenever prior appropriation is suspended. We find there is room for efficiency improvements, as the likelihood of excess use correlates positively with increasing crop productivity. While instrumenting for productivity reveals that most secure rights do not engage in excess use, we do find that seniority leads to excess withdrawal for smaller rights.

WORK IN PROGRESS

Making a Call on the River: Water Use in the Colorado River Basin

Qi Zhang, *Peter Debaere, Tianshu Li*

Teaching Experience

Teaching Assistant, University of Virginia 2019 - 2024

    Intermediate Microeconomics

    Introduction to Econometrics

    Principles of Macroeconomics

    Principles of Microeconomics

Teaching Assistant, Tufts University 2019 - 2020

    Stata Session

    Graduate Summer Math Camp

Work Experience

Research Assistant, University of Virginia

    Prof. Peter Debaere 2023 - Present

Research Assistant, Tufts University

    Prof. Kyle Emerick 2019 - 2020

Honors and Awards

Varkey Family Endowed Fellowship	Tufts University	2019
Department of Economics Summer Scholarship	Tufts University	2019

Skills

Technical	Stata, Python, R, ArcGIS
Languages	Chinese (native), English (fluent)

References

Kerem Cosar (Advisor)	**James Harrigan**	**Peter Debaere**
Professor	Professor	Professor
Department of Economics	Department of Economics	Darden School of Business
University of Virginia	University of Virginia	University of Virginia
kerem.cosar@virginia.edu	james.harrigan@virginia.edu	DebaereP@darden.virginia.edu