

# Kazuki Motohashi

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## Education

Ph.D. Candidate, Economics and Public Policy, Tufts University, 2018-2023 (expected).

Master of Public Policy, The University of Tokyo, 2014.

Bachelor of Laws, The University of Tokyo, 2012.

## Research Fields

Environmental Economics, Development Economics

## Working Papers

### **Unintended Consequences of Sanitation: Negative Externalities on Water Quality and Health in India (Job Market Paper)**

Abstract: Developing countries have increased sanitation investment to reduce diarrheal diseases. However, the positive health effects of latrine construction can be offset by water pollution and negative health effects due to poor treatment of fecal sludge. I estimate these negative externalities of a sanitation policy in India that subsidized the construction of over 100 million latrines. Exploiting geographical variation in soil characteristics and the differential increase in latrine coverage across districts, I find that the policy increases river pollution by 72%. While it reduces diarrheal mortality overall, this positive health effect is two-thirds smaller in areas with lower wastewater treatment capacity.

### **Impact of Municipal Mergers on Pollution Control: Evidence of River Pollution in Japan** (with Michiyoshi Toya)

Abstract: Municipal mergers are widely adopted by policymakers to improve local public services, including pollution control. Municipal mergers can improve environmental quality by internalizing pollution spillovers to neighboring municipalities, but coordination costs and unbalanced political power among pre-merger municipalities can work in the opposite direction. We test this relationship in the context of Japan's large-scale municipal mergers that almost halved the number of municipalities. By using the staggered implementation of municipal mergers and 30-year water quality data, we find that municipal mergers increase water pollution, and the effects persist for about 15 years. Our results point to weaker pollution control through coordination cost and political economy channels.

**The Poverty Impacts of Labor Heat Stress in West Africa under a Warming Climate** (with Wajiha Saeed, Iman Haqiqi, Qinqin Kong, Matthew Huber, Jonathan Buzan, Shun Chonabayashi, Thomas Hertel), *Accepted, Earth's Future*

## Works in Progress

Temperature and Health Behaviors: Evidence from Sanitation in India

Misperceived Cost and Social Interaction in Technology Adoption: Evidence from Latrine Usage in India

VIIRS and the Future of Night Lights Data in Economics (with Paul Brimble, Axel Ezimendi-Larrinaga, Adam Storeygard)

The Holy Dip: Religion, River Pollution, and Health Consequences in India (with Moogdho Mim Mahzab, Sheetal Sekhri)

Does Trade with Multinationals Induce Greener Production? Evidence from the Bangladesh Fashion Industry (with Kazi Iqbal, Moogdho Mim Mahzab, Haruka Takayama)

## Teaching Experience

Teaching Assistant, EC-107 Econometric Analysis (undergraduate), Tufts University, Fall 2022

Instructor, Economic Development (undergraduate), Gakushuin University, Fall 2020

Teaching Assistant, EIB E211 Microeconomics (graduate), Tufts University, Spring 2019

## Research and Work Experience

Short-term Consultant, Environment, Natural Resources and Blue Economy Global Practice, The World Bank, Jun 2021, Sep 2021-Dec 2021

Research Assistant for Shinsuke Tanaka, Tufts University, Summer-Fall 2019, Fall 2020-Present

Research Assistant for Daiju Narita, The University of Tokyo, Summer 2019, Fall 2020-Present

Research Assistant for Hidefumi Yokoo, Hitotsubashi University, Summer 2020

Visiting Scholar, Institute of Economic Research, Hitotsubashi University, Summer-Fall 2020

Research Assistant for Jenny Aker, Tufts University, Fall 2019

Research Assistant for Melissa Dell, Harvard University, Summer 2019

Researcher, Environment and Energy Division, Mitsubishi Research Institute, Inc., 2014-2018

Intern, Water Team, Environment Directorate, OECD, Jan-Mar 2014

## Research Grants

The Murata Science Foundation Research Grant (Co-PI), JPY 2,960,000, 2022

The Murata Science Foundation Research Grant, JPY 2,000,000, 2021

Hitachi Center Graduate Student Summer Research Grant, USD 3,000, 2021

Tufts Institute of the Environment: Environmental Research Fellowship, USD 5,000, 2021

Masason Foundation Research Grant (Co-PI), JPY 3,030,800, 2020

Crowdfunding (academist), JPY 906,800, 2020

Tufts Economics and Public Policy Program Summer Research Grant, USD 2,000, 2020

## Scholarships, Honors and Awards

Neubauer Fellowship in Economics and Public Policy, 2018-2023

Agricultural & Applied Economics Association Travel Grant, 2022

Tufts CIERP Travel Fund for Experiential Learning, 2022

Tufts Graduate School of Arts and Sciences Student Conference Reimbursement Fund, 2022

Berkeley/Sloan Summer School in Environmental and Energy Economics Diversity Fellowship, 2020

Rotary Foundation Global Grant Scholarship, 2018-2020

Outstanding Student Award, Graduate School of Public Policy, University of Tokyo, 2014

## Seminars and Conference Presentations (including scheduled)

2022 Tufts EPP Workshop (virtual), JADE/GRIPS Development Workshop (virtual), JEA (Japanese Economic Association) Spring Meeting (virtual, poster), J-TREE (Japan-Tokyo Resource and Environmental Economics)/Aoyama Gakuin University, AAEA (Agricultural & Applied Economics Association) Annual Meeting (poster), AMES (Asia Meeting of the Econometric Society in East and South-East Asia), Camp Resources XXVIII, SWELL (Seminar in Water Economics onLLine, virtual), AMIE 2nd Workshop in Applied Microeconomics.

2021 SEEPS (Society for Environmental Economics and Policy Studies) Camp 2021 (virtual), Waseda University (virtual), AERE (Association of Environmental and Resource Economists) Summer Conference (virtual), Tufts EPP Workshop (virtual, three times), NEUDC (The North East Universities Development Consortium) Conference (virtual).

2020 The Young JADE (Japanese Association for Development Economics) Conference (virtual), Hitotsubashi University (virtual), Tufts EPP (Economics and Public Policy) Workshop (virtual, twice).

2018 MIT Water Summit (poster).

## Others

Citizenship: Japan

Languages: Japanese (native), English (fluent), Chinese (basic), French (basic)

Programming and Software Skills: Stata, R, LaTeX, Python, Matlab, ArcGIS, QGIS

## References

**Professor Ujjayant Chakravorty**

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**Professor Shinsuke Tanaka**

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The Fletcher School

Tufts University

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