#### SHUNSUKE TSUDA

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#### **BROWN UNIVERSITY**

Placement Director: Toru Kitagawa toru\_kitagawa@brown.edu 401-863-3836 Graduate Administrator: Angelica Spertini angelica spertini@brown.edu 401-863-2465

#### **Office Contact Information**

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## Education

#### Ph.D. Candidate in Economics, Brown University

2016-present

Expected Completion Date: May 2023

Thesis Title: "Essays on Development Economics"

#### References

**Professor Andrew Foster** 

Department of Economics, Brown University afoster@brown.edu (401) 863-2537

#### Professor Daniel Björkegren

Department of Economics, Brown University danbjork@brown.edu (401) 863-3690

#### **Professor Matthew Turner**

Department of Economics, Brown University matthew\_turner@brown.edu (401) 863-9331

#### **Professor Jesse Shapiro**

Department of Economics, Harvard University jesse\_shapiro@fas.harvard.edu (617) 444-9571

M.A. Economics, Brown University
 M.Phil. Economics, The University of Tokyo
 B.S. Agriculture, Hokkaido University
 Visiting student, Shri Ram College of Commerce (University of Delhi)
 2012-2013

## Teaching and Research Fields

Primary fields: Development Economics, Spatial Economics, Environmental Economics Secondary fields: Political Economy, Conflict, Agricultural & Resource Economics

## Research Papers

# "Human and Nature: Economies of Density and Conservation in the Amazon Rainforest" (with Mari Tanaka and Yoshito Takasaki) Job Market Paper

This paper investigates the ways to resolve trade-offs between human and ecological well-being in tropical forests. We build a multi-sector spatial model of rainforest communities that features concentration and dispersion forces of the population. To estimate the model, we exploit exogenous river networks in the Peruvian Amazon without road access and use detailed georeferenced data with fine spatial resolution. We find that the agglomeration externality in agricultural production outweighs the dispersion force in access to land, leading to higher productivity with smaller deforestation per farmer by concentrating. We also find the congestion externality with spatial spillovers in natural resource extraction. We provide evidence that the agglomeration is primarily driven by the economies of scale in transport technology and

agricultural intensification. A quantification exercise reveals that the agglomeration externality contributes substantially to improving human welfare and reducing deforestation, while increasing natural resource depletion through a general equilibrium effect. Counterfactual experiments demonstrate that well-targeted place-based protection policies and river infrastructure investments are complementary to improve human-ecological well-being. Protecting the rural frontier works primarily to conserve biodiversity by increasing the congestion force in natural resource extraction within more compact areas for human settlements. Improving transport infrastructure that integrates a hinterland works primarily to reduce total deforestation by making the agglomeration benefits spread more evenly across the basin.

# "The Golden City on the Edge: Economic Geography and Jihad over Centuries" (with Masahiro Kubo) Hayami Award 2022

This paper uncovers the evolution of cities and Islamist insurgencies, so called *jihad*, in the process of reversal of fortune over centuries. In West Africa, water access in ancient periods predicts core cities of inland trade routes—the trans-Saharan caravan routes—created up to 1800s, when historical Islamic states played significant roles in economy before European colonization. On the other hand, the ancient water access does not have a persistent influence on contemporary city formation and economic activities. Since European colonization and the invention of modern trading technologies, along with the constant shrinking of water sources, landlocked pre-colonial core cities contracted or became extinct. Employing an instrumental variable strategy, we show that these deserted locations are replaced by battlefields for jihadist organizations today. We argue that the power structure of Islamic states and the European military during the colonial era in the 19th century shapes the persistence of jihadist ideology as a legacy of colonization. Investigation into religious ideology related to jihadism, using individual-level surveys from Muslims, further supports this mechanism. Moreover, the concentration of jihad in 'past-core-and-present-periphery' areas in West Africa is consistent with a global-scale phenomenon. Finally, the spillover of violent events beyond these stylized locations is partly explained by organizational heterogeneity among competing factions (Al Qaeda and the Islamic State) over time.

## **Publications**

# Tsuda, Shunsuke. "Refugee inflows, surplus farm labor, and crop marketization in rural Africa." *Journal of Development Economics* (2022): 102805.

This paper sheds light on the structure of factor and output market frictions to investigate long-term effects of refugee inflows on host farmers. Combining a canonical agricultural household model, the natural experimental setting of mass refugee inflows into Tanzania in the early 1990s, and longitudinal panel data from the host economy, I show that refugee inflows cause market-specific gains and losses. Refugee inflows tighten the off-farm labor market participation constraint, implying an increase in surplus farm labor and labor market inefficiency. On the other hand, I observe a positive impact on the transition from subsistence to crop marketization. This transition is revealed to be primarily due to a reduction in fixed transaction costs around refugee camps, not due to an increase in consumption demand by refugees. While the overall impact on agricultural labor productivity is negative, the "surplus farm labor effect" and the "crop marketization effect" act in opposite directions.

## Works in Progress

- "De-Radicalization and Reintegration from Violent Islamic Extremism." (with Robert Blair, Jun Goto, and Yosuke Nagai)
- "The Economics of Subsistence in Africa." S4 Graduate Student Paper Prize 2020, the 2nd place
- "Caste Segregation and Spatial Misalloction in Village India." (with Kazuki Motohashi and Mike Neubauer)

## **Professional Activities**

#### Referee

Journal of Development Economics, Journal of Urban Economics

#### **Presentations**

2022	University of Georgia; Osaka University; IRES Graduate Workshop (Chapman)*; Growth Lab (Brown)*; Ap-
	plied Micro Breakfast (Brown); Applied Micro Lunch (Brown, twice); JADE Conference (Virtual)*

2021 Applied Micro Breakfast (Brown); Applied Micro Lunch (Brown)

NEUDC (Dartmouth, Virtual); Working Group in African Political Economy (WGAPE) Annual Meeting (Virtual); Research Conference on Forced Displacement (UN City, Copenhagen); Kobe Development Economics and Economic History Seminar (Kobe-DEEH)

2019 Applied Micro Lunch (Brown, twice)

2018 North East Universities Development Consortium (NEUDC, Cornell)

2016 Hitotsubashi Summer Institute; JEA meeting (Nagoya-U); Microeconomics Workshop (U-Tokyo)

#### **Affiliations**

Graduate Affiliate, Institute at Brown for Environment and Society, Brown University	2021-present
Guest Researcher, CREPE, The University of Tokyo	2020-present
Trainee, Population Studies and Training Center, Brown University	2017-present
Fellow, Spatial Structures in the Social Sciences, Brown University	2017-present

## Research Experience and Other Employment

Research Assistant for Professors Daniel Bjorkegren and Nick Tsivanidis	2019
Research Assistant for Professors Jesse Shapiro and Matthew Turner	2018
Research Assistant for Professor Andrew Foster	2017-2018
Research Assistant for Professor Yoshito Takasaki	2015-2017
Research Assistant for Professors Yasuyuki Sawada, Takashi Kurosaki, and Jun Goto	2015-2017
Operation of Self-Help-Groups program, Internship at Chetanalaya, India	2012-2013

## **Teaching Experience**

## **Brown University, Department of Economics**

ECON2020 Computing for Economists, Instructor	Spring 2020, Spring 2021, Spring 2023			
CEEC0925 Econometrics: Statistical Tools to Understand Economic Data,	A for Kenichi Shimizu 2019			
The University of Tokyo, Graduate School of Economics and Graduate School of Public Policy				
Development Economics: Macroeconomic Approach, TA for Professor Ken	ichi Ueda 2016			

Natural Resource and Environmental Economics, TA for Professor Yoshito Takasaki	2015
Case Study: Financial Development and Inequality, TA for Professor Kenichi Ueda	2015

## Honors, Fellowships, and Grants

Interdisciplinary Opportunity Dissertation Completion Fellowship	2021-2022
Teaching Award, Brown University	2021
The Bravo Center Research Funding, Brown University	2020
The Murata Science Foundation Research Grant	2020
Graduate Program in Development (Watson Institute, Brown University) Summer Funding	2020
S4 (Spatial Structures in the Social Sciences) Graduate Student Paper Prize, the 2nd place	2020
Japan Student Services Organization Scholarship	2016-2019
Research Fellow of Japan Society for the Promotion of Science (DC1)	2016
Sato Yo International Scholarship Foundation	2012-2013

<sup>\*</sup>Presented by a coauthor

# Others

**Computer skills**: Stata, Julia, Python, Matlab, ArcGIS, Git, LaTex, Qualtrics **Languages**: English (fluent), Japanese (native), Spanish (basic), Hindi (beginner)