### SHUNSUKE TSUDA

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### **BROWN UNIVERSITY**

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#### **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 Economic Geography, Environment, and Development"

#### References

Professor **Andrew Foster**Department of Economics, Brown University

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Professor Daniel Björkegren

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**Professor Matthew Turner** 

Department of Economics, Brown University matthew turner@brown.edu

(401) 863-9331

Professor Jesse Shapiro

Department of Economics, Harvard University

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(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 Economics

# Research Papers

# "Human and Nature: Economies of Density and Conservation in the Amazon Rainforest"

(with Mari Tanaka and Yoshito Takasaki) Job Market Paper

While the conservation of tropical forests is a key element of global efforts to slow climate change and preserve biodiversity, it is unclear how conservation efforts will affect the material standard of living among local populations. We argue that this question turns on the direction and magnitude of agglomeration economies in agricultural production, forest clearing, and natural resource extraction. In particular, this paper builds and estimates a multi-sector spatial model of rainforest communities using detailed georeferenced data from major river basins in the Peruvian Amazon and plausibly exogenous variation in the structure of river networks. We find that the agglomeration externality in agricultural production outweighs dispersion forces in access to land, implying that higher concentration leads to higher productivity with smaller deforestation per farmer. We also find a strong congestion externality with spatial spillovers in natural resource

extraction. The estimated agglomeration externality, which is primarily driven by the economies of scale in transport technology and agricultural intensification, has large impacts on improving welfare and reducing deforestation but leads to natural resource depletion through general equilibrium effects. Counterfactual simulations demonstrate that well-targeted river infrastructure investments and place-based protection policies are complementary in improving the human-ecological well-being. While protecting the rural frontier primarily mitigates natural resource depletion, transport infrastructure that integrates hinterlands can reduce deforestation by generating moderate-sized but dispersed settlements and spreading the agglomeration benefits 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 the reversal of fortune over the centuries. In West Africa, water access in ancient periods predicts the locations of the core cities of inland trade routes—the trans-Saharan caravan routes—founded up to the 1800s, when historical Islamic states played significant economic roles before European colonization. In contrast, ancient water access does not have a persistent influence on contemporary city formation and economic activities. After European colonization and the invention of modern trading technologies, along with the constant shrinking of water sources, landlocked pre-colonial core cities contracted. Employing an instrumental variable strategy, we show that these deserted locations have today been replaced by battlefields for jihadist organizations. We argue that the power relations between Islamic states and the European military during the 19th century colonial era shaped the persistence of jihadist ideology as a legacy of colonization. Investigations into religious ideology related to jihadism, using individual-level surveys from Muslims, support this mechanism. The concentration of jihadist violence in "past-core-and-present-periphery" areas in West Africa is consistent with a global-scale phenomenon.

## **Publications**

## Tsuda, Shunsuke. "Refugee inflows, surplus farm labor, and crop marketization in rural Africa." Journal of Development Economics, Volume 155, March 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 Extremism." (with Robert Blair, Jun Goto, and Yosuke Nagai)
- "Caste Segregation and Spatial Misalloction in Village India" (with Kazuki Motohashi and Mike Neubauer)
- "The Economics of Subsistence in Africa." S4 Graduate Student Paper Prize 2020, the 2nd place

## **Professional Activities**

#### Referee

Journal of Development Economics, Journal of Urban Economics

#### **Presentations**

- University of Georgia; Osaka University; IRES Workshop (Chapman)\*; Growth Lab (Brown)\*; Applied Micro Breakfast (Brown); Applied Micro Lunch (Brown, twice); JADE Conference (Virtual)\*
- 2021 Applied Micro Breakfast (Brown); Applied Micro Lunch (Brown)

| <ul> <li>NEUDC (Dartmouth, Virtual); Working Group in African Political Economy (WGAPE tual); Research Conference on Forced Displacement (UN City, Copenhagen); Kobe D and Economic History Seminar (Kobe-DEEH)</li> <li>Applied Micro Lunch (Brown, twice)</li> <li>North East Universities Development Consortium (NEUDC, Cornell)</li> <li>Hitotsubashi Summer Institute; JEA meeting (Nagoya-U); Microeconomics Workshop</li> </ul> *Presented by a coauthor   | evelopment Economics  |
|--|---|
| Affiliations Graduate Affiliate, Institute at Brown for Environment and Society, Brown University Guest Researcher, CREPE, The University of Tokyo Trainee, Population Studies and Training Center, Brown University Fellow, Spatial Structures in the Social Sciences, Brown University   | 2021-present<br>2020-present<br>2017-present<br>2017-present                        |
| Research Experience and Other Employment   |   |
| Research Assistant for Professors Daniel Björkegren and Nick Tsivanidis Research Assistant for Professors Jesse Shapiro and Matthew Turner Research Assistant for Professor Andrew Foster Research Assistant for Professor Yoshito Takasaki Research Assistant for Professors Yasuyuki Sawada, Takashi Kurosaki, and Jun Goto Operation of Self-Help-Groups program, Internship at Chetanalaya, India  | 2019<br>2018<br>2017-2018<br>2015-2017<br>2015-2017<br>2012-2013                    |
| Teaching Experience  |   |
| Brown University, Department of Economics  |   |
| ECON2020 Computing for Economists, Instructor Spring 2020, Spring 2020 | pring 2021, Spring 2023<br>izu 2019   |
| The University of Tokyo, Graduate School of Economics and Graduate School of Public Po   | •   |
| Development Economics: Macroeconomic Approach, TA for Professor Kenichi Ueda<br>Natural Resource and Environmental Economics, TA for Professor Yoshito Takasaki<br>Case Study: Financial Development and Inequality, TA for Professor Kenichi Ueda   | 2016<br>2015<br>2015  |
| Honors, Fellowships, and Grants  |   |
| Interdisciplinary Opportunity Dissertation Completion Fellowship Teaching Award, Brown University The Bravo Center Research Funding, Brown University The Murata Science Foundation Research Grant Graduate Program in Development (Watson Institute, Brown University) Summer Funding S4 (Spatial Structures in the Social Sciences) Graduate Student Paper Prize, the 2nd place Japan Student Services Organization Scholarship Research Fellow of Japan Society for the Promotion of Science (DC1) Sato Yo International Scholarship Foundation   | 2021-2022<br>2021<br>2020<br>2020<br>2020<br>2020<br>2016-2019<br>2016<br>2012-2013 |

# Others

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

Last update: October 30, 2022