# **MOTOHIRO KUMAGAI**

https://motohirokumagai.com/ motohiro kumagai@brown.edu

## **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**

**Home Contact Information** 

Department of Economics 64 Waterman Street., Box B +1-401-345-9892 412 Hope Street, Floor 2 Providence, RI, 02906 +1-401-660-0729

# **Personal Information:**

Citizenship: Japan

### **Pre-Doctoral Studies:**

BA. Economics, Hitotsubashi University, 2013 MA. Economics, Hitotsubashi University, 2015

### **Graduate Studies:**

Brown University, Providence, RI, USA 2016 to present

Ph.D. Candidate in Economics

Thesis Title: Essays on the Biogeographical Origins of Economic Development

Expected Completion Date: May 2023

## References:

Professor Oded Galor Professor Stelios Michalopoulos

Department of Economics, Brown University Department of Economics, Brown University

+1-401-863-2117 +1-401-863-2506

Professor Louis Putterman

Department of Economics, Brown University

louis\_putterman@brown.edu

+1-508-517-6976

+1-401-863-3837

## **Research and Teaching Fields:**

Primary fields: Growth and Development, Macroeconomics, Political Economy

Secondary field: Cultural Economics

# **Research Experience and Other Employment:**

Summer 2018 Brown University, Research Assistant, Professor Oded Galor

## **Professional Activities**

#### **Editorial Service:**

Economic Inquiry (1), Review of Economics and Statistics (1)

### Academia:

Oct 2020 Global Wellbeing Initiative, Discussant

Nov 2021 NEUDC, Paper Discussant

# **Conferences and Seminar Presentations**

Internal Growth Seminar at Brown University (multiple times), 2018-2022

NEUDC at Boston University, 2021

Applied Young Economist Webinar at Monash University, 2022

Eurasia Business and Economics Society Conference at Berlin, Oct 2022

SEA Annual Meeting, Nov 2022

PhD EVS, Mar 2023

ASREC at Harvard University, Mar 2023

JADE-CEPR-Time Conference on Economic Development at Tokyo University, Apr 2023

Kyoto Summer Workshop on Applied Economics, July 2023

Historical Data Analysis Workshop at Tokyo University of Science, July 2023

EDW/CEI Seminar at Hitotsubashi University, Sep 2023

Seminar at Musashi University, Oct 2023

SEA Annual Meeting, Nov 2023

Tokyo Labor Economics Workshop at Tokyo University, Dec 2023

Seminar at Waseda University, Feb 2024

Seminar at Otaru University of Commerce, Feb 2024

Mini-conference of Economics Development and History at Doshisha University, March 2024

Seminar at Kobe University, April 2024

Deep Roots of Political and Economic Development conference in Vienna, June 2024 (scheduled)

## Honors, Scholarships, and Fellowships:

2016-2019 Japan Student Services Organization Scholarship
2019 Third Year Paper Distinction Award, Brown University
Spring 2021 Merit Dissertation Fellowship, Brown University

## **Research Papers:**

"Overkill, Extinction, and the Neolithic Revolution" (Job Market Paper)

Abstract: This research explores the biogeographical origins of the emergence and diffusion of agriculture. I develop a model showing that large-herbivore extinction decreased hunting gains and permitted an earlier agricultural transition. It also shows that mammals 'biological vulnerability increased the extinction risk and promoted an earlier transition. To test the predictions, I construct a novel measure of the loss of hunting resources resulting from mammal extinction. Using multiple datasets and exploiting the biological vulnerability as an instrument for the extinction, the research establishes a positive impact of the extinction on the timing and the likelihood of the agricultural transition. It also shows a persistent effect of the prehistoric extinction on socioeconomic development that lasted until the preindustrial period.

## "Horses and the State"

Abstract: This research explores the effect of horses on the state and on historical battles. It exploits multiple exogenous sources of variation in the adoption of horse riding on the battlefield: (i) the exogenous regional variation in the spread of horse-riding technology, (ii) the exogenous variation in the availability of native horses, and (iii) the exogenous change in the availability of horses in the Americas during the Columbian Exchange. The research, using these exogenous variations and multiple datasets spanning several millennia, provides repeated evidence of the significant impact of horses on state

formation and on historical battles. Rich historical accounts support the critical role of cavalry in state formation through its influence as a source of military power.

# "Biogeographical Origins of Risk Preference"

Abstract: This paper explores the biogeographical origins of differences in risk preference across regions and individuals. The theory shows that individuals whose ancestors lived in regions with abundant hunting resources tend to be more risk averse. Such regions attracted even risk-averse individuals, and thus the population became more risk averse. To test the hypothesis, I construct a novel measure of megaherbivore biomass. This measure is a strong predictor of hunting dependency in traditional societies. I show that, consistent with the theory, descendants of inhabitants of regions characterized by larger megaherbivore biomass have higher risk aversion.

# **Teaching Experience**

2013	Introductory Microeconomics @Hitotsubashi University, Teaching Assistant
2014	Introduction to Economics @Hitotsubashi University, Teaching Assistant
2015	Basic Economic Mathematics @Hitotsubashi University, Teaching Assistant
2015	Introductory Microeconomics @Hitotsubashi University, Teaching Assistant
2016	Advanced Macroeconomics @Hitotsubashi University, Teaching Assistant
2023	Theory of Economic Growth @Brown University, Teaching Assistant

## Languages

English (fluent), Japanese (native)

### **Software**

Python, ArcGIS, STATA, Matlab, LaTex