

International Economic Development Program (IEDP)
Graduate School of Humanities and Social Sciences

Social Innovation Science (SIS)
Graduate School of Innovation and Practice
for Smart Society
(From April 2023)



HIROSHIMA UNIVERSITY

Mission and Methods of IEDP

- IEDP fosters **advanced professionals and researchers** who can contribute to development policy planning, implementations, evaluations and improvements towards promotion of SDGs.
 - ✓ Global mindsets and perspectives
 - ✓ Hands on education: Fieldworks & Internships
 - ✓ Knowledge & skills necessary in **evidence-based interdisciplinary social science.**
- We have provided JDS fellows with relevant knowledge and skills on Development of Capacity for **Development Policy Making, Implementation and Governance.**

Mission and Approach of SIS

- SIS fosters **advanced professionals and researchers** who have a **mindset** matching Innovation & Practice for Smart Society to implement **institutional design** and **technological development** that would flexibly adapt to the regional issues of societies with diverse history and cultures across time and space, from the global to local communities to achieve a **Smart Society**.
 - ✓ A **Smart Society** is a human-centered society that achieves both economic development and solution of social issues through a system that highly integrates cyberspace (virtual space) and physical space (real space).
- We have provided JDS fellows with relevant knowledge and skills on Development of Capacity for **Social Innovation Science**:
 - ✓ Research in this area seeks to leverage digital information analysis technologies, such as AI and machine learning, as researchers acquire expertise in **immediate and quantitative decision-making science-based methodologies**.

3. Support for students

a. Thesis advisory committee

- ✓ Three supervisors



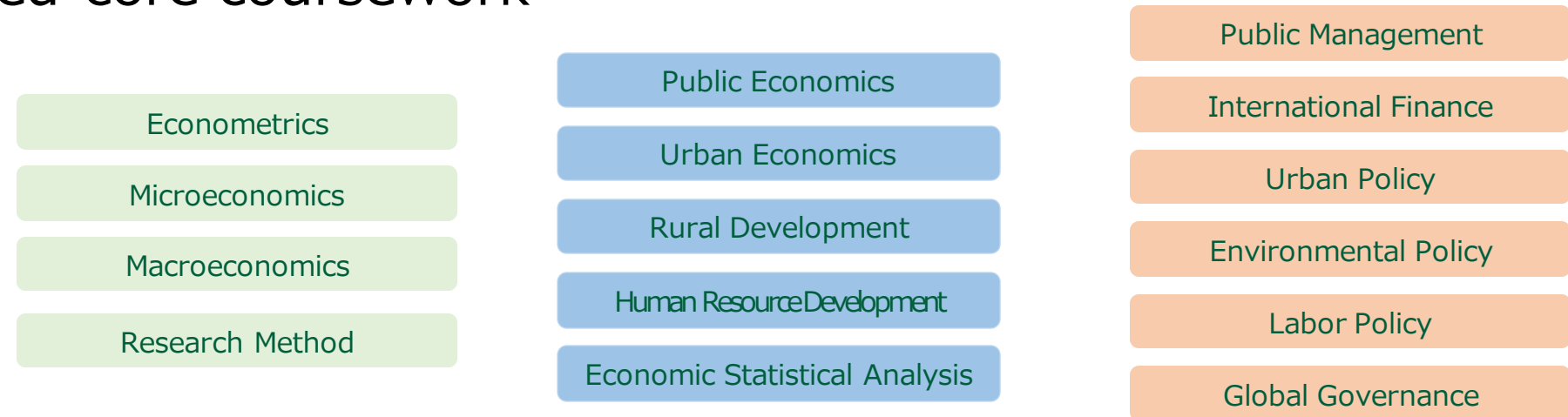
b. Student mentorship system

- ✓ Doctoral senior students will be assigned to each JDS fellow
- JDS fellows can get appropriate advices & ample support from the committee members & the student mentors

- IEDP/SIS provides the systematic curriculum to cultivate abilities to link **evidence-based interdisciplinary social science** methods to practical decision making and problem solving.

1. Core discipline is **Economics and Causal Inference**

2. Well-structured core coursework



- JDS fellows can deepen the knowledge & skills on economics & evidence-based policy making methods gradually.

4. Special program for JDS fellows

a. Preliminary education

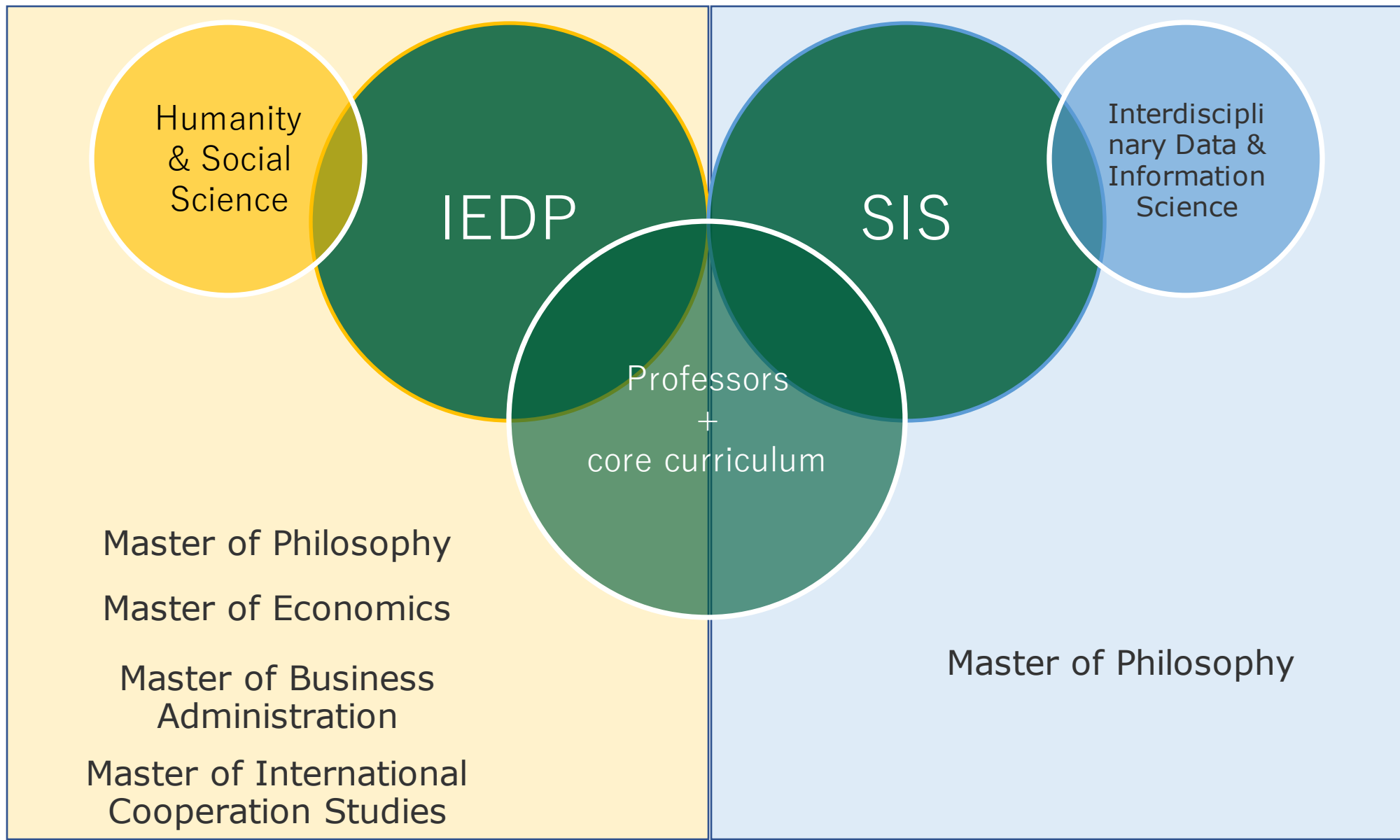
- ✓ Basic economics and math training program

b. Feedback seminar

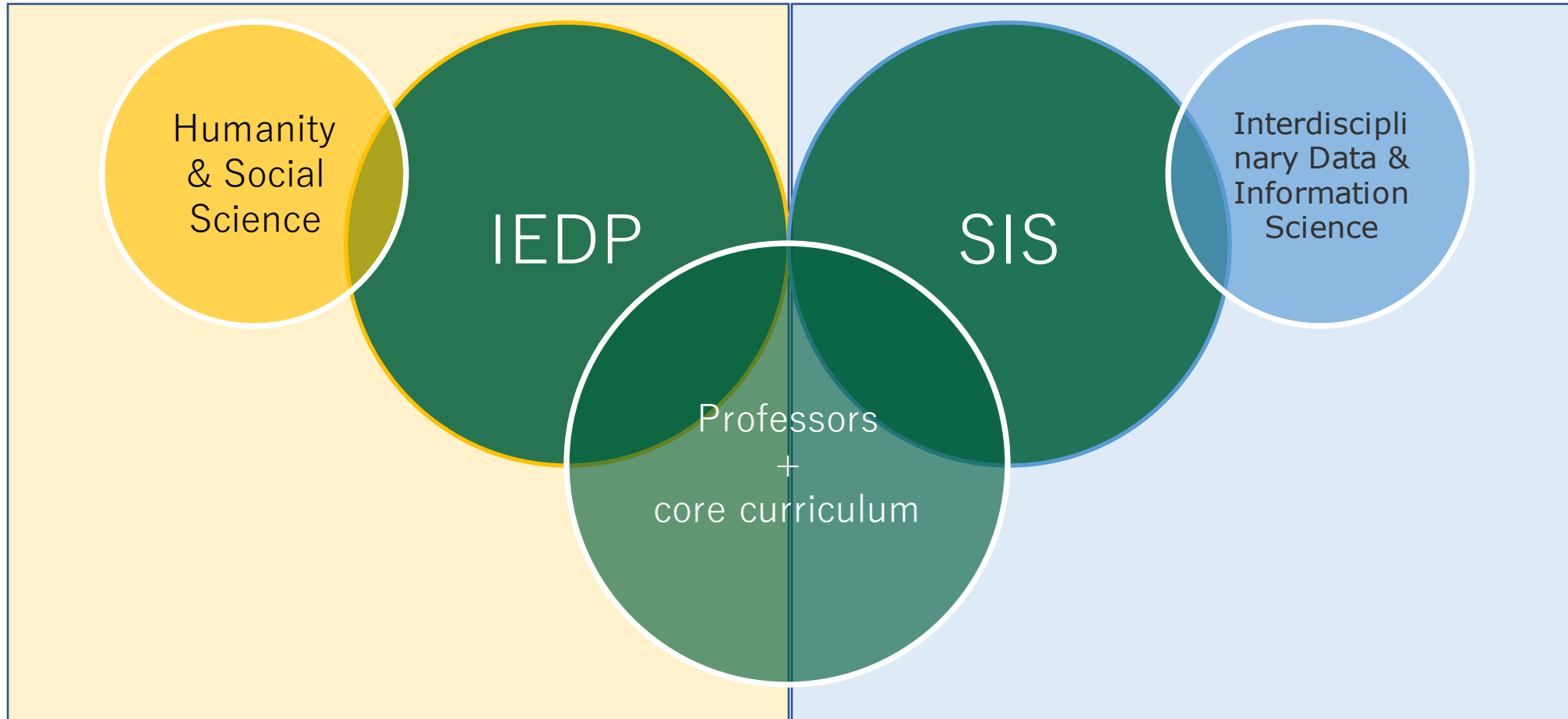
- ✓ Global human resource network

- JDS fellows can utilize the educational opportunities before/after coming to IEDP

Features of IEDP/SIS



IEDP or SIS



Note

The graduate school to which you will be assigned will be determined by the content of your research plan and your academic advisor.

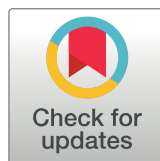
RESEARCH ARTICLE

The impact of unconditional cash and food assistance on contraceptive expenditure of rural households in Coastal Bangladesh: Evidence from fuzzy RDD

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Abstract


This study investigates the impact of unconditional cash and food (UCF) assistance on the monthly contraceptive expenditure of rural households in coastal Bangladesh using a fuzzy regression discontinuity design (RDD). Eligibility for UCF assistance was based on the running variable of land ownership in acres. We used eligibility as an instrumental variable to estimate the local average treatment effect of UCF assistance on contraceptive expenditures. The results show that UCF assistance results in increases in monthly contraceptive expenditures.

OPEN ACCESS

Citation: Bari M.A, Khan GD, He B, Yoshida Y (2022) The impact of unconditional cash and food assistance on contraceptive expenditure of rural households in Coastal Bangladesh: Evidence from fuzzy RDD. PLoS ONE 17(1): e0262031. <https://doi.org/10.1371/journal.pone.0262031>

Article

The Impact of Smart Prepaid Metering on Non-Technical Losses in Ghana

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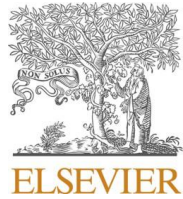
Abstract: The high incidence of electricity theft, meter tampering, meter bypassing, reading errors, and defective and aged meters, among others, increases utility losses, especially non-technical losses (NTL). A utility in Ghana piloted a non-technical loss reduction program in 2019 to replace postpaid meters with anti-tamper, anti-fraud, and anti-theft smart prepaid meters. By using customer-level residential billing panel data from 2018 to 2019 obtained from the utility, we assess the effectiveness of this program using the difference-in-differences fixed-effect approach. On average, the results indicated that the reported amount of customers' monthly electricity consumption increases by 13.2% when any tampered postpaid meter is replaced with a smart prepaid meter, indicating the NTLs by customers. We further employed quantile difference-in-differences regression and observed that reported energy consumption has increased for all households except those at the lower quantile (25th quantile). We conclude that smart prepaid metering could be a remedy to reduce NTLs for the electricity distribution sector in areas where electricity theft is rampant.

Keywords: smart meters; electricity theft; non-technical losses; difference-in-differences; quantile regression



Citation: Otchere-Appiah, G.; Takahashi, S.; Yeboah, M.S.; Yoshida, Y. The Impact of Smart Prepaid Metering on Non-Technical Losses in Ghana. *Energies* **2021**, *14*, 1852. <https://doi.org/10.3390/en14071852>

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Resources Policy

journal homepage: <http://www.elsevier.com/locate/resourpol>



Pass-through of commodity price to Mongolian stock price: Symmetric or asymmetric?

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ARTICLE INFO

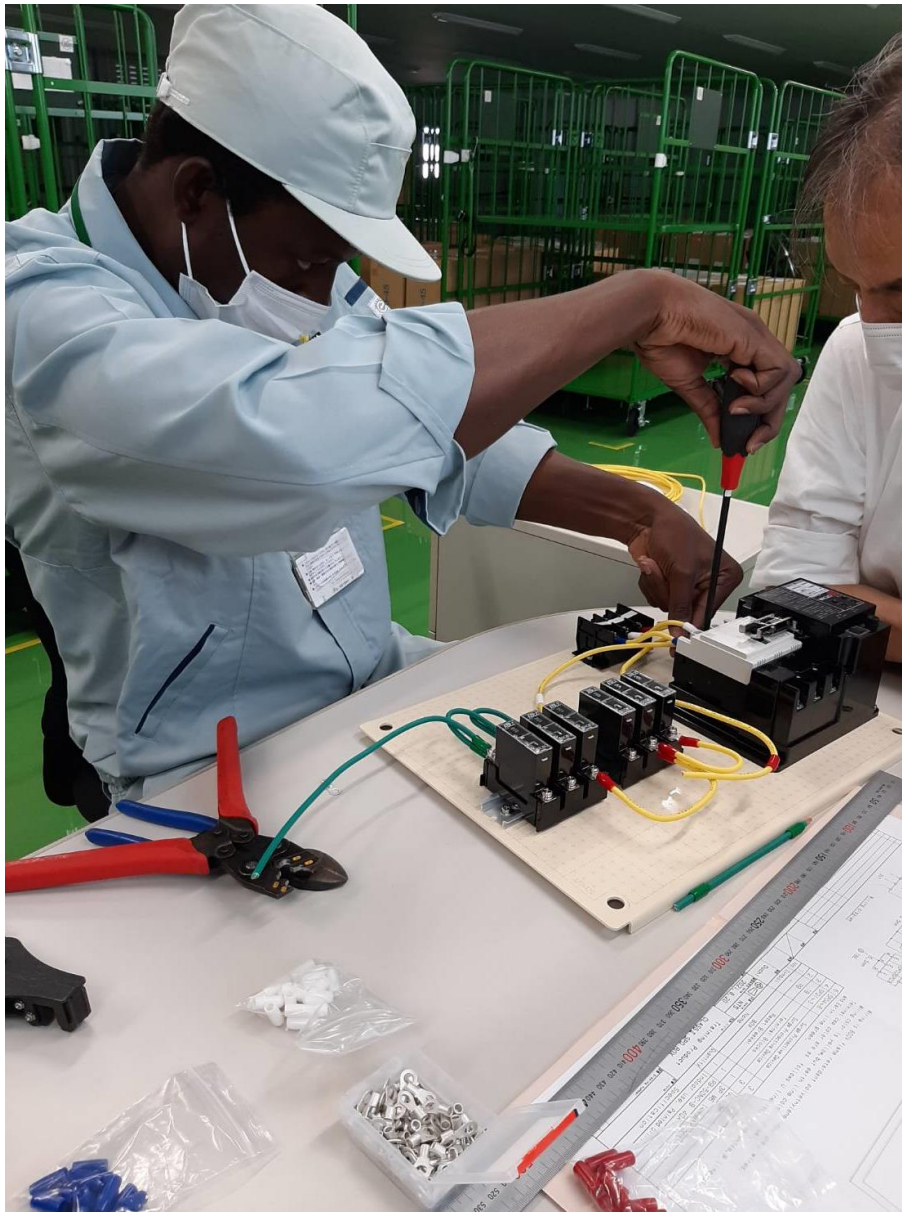
Keywords:

Stock price
Commodity price
Asymmetry
Nonlinear ARDL
Mongolia

ABSTRACT

Mongolia is a natural resource-rich country, so that its stock market is highly dependent on price fluctuations of commodities, particularly copper and coal. One crucial problem is that the responses of the stock market performance to a shock of the commodity price can be nonlinear or asymmetric. This study addresses such asymmetric linkages by applying nonlinear autoregressive distributed lags (NARDL) models during the period from January 2007 to December 2018. The results show clear evidence of asymmetric long-run relationships between stock price and the commodity price, supporting that different behaviors of stock price in response to positive and negative shocks on the commodity price. Specifically, our analysis presents a positive relationship between copper price and stock price in the case of a positive shock on copper price, but no clear relationship in the case of a negative shock on copper price. The results also reveal a positive relationship between coal price and stock price in the case of a negative shock on coal price, but no clear relationship in the case of a positive shock on coal price. The Mongolian stock market is favorably sensitive to an increase in copper price but vulnerable to a decline in coal price. Possible explanations behind the results are also discussed.

(IF: 5.634, 20/125 (Q1) in Environmental Studies)





HU ranks in Top 10 of THE Japan University Rankings 2022

THE Times Higher Education News Rankings Jobs Study abroad Events Resources Solutions


Rankings < Impact Rankings China Subject Ratings **Japan University Rankings** US College Rankings By s > Q

Japan University Rankings 2022

The *Times Higher Education* Japan University Rankings 2022 are designed to answer the questions that matter most to students and their families when making one of the most important decisions of their lives – who to trust with their education.

The methodology includes 16 performance indicators, with three of the metrics drawing on the *THE Japan Student Survey*.

Read more...



2022

How to get your uni ranked

RANKING		SCORES			
Rank	Name Country/Region	No. of FTE Students	No. of students per staff	International Students	Finance per 1,000 students
1	Tohoku University Miyagi	17,409	11.8	12.1	¥5,501
2	The University of Tokyo Tokyo	24,784	9.7	16.4	¥8,221
=3	Osaka University Osaka	22,485	10.5	10.0	¥4,656
=3	Tokyo Institute of Technology Tokyo	9,928	9.6	17.3	¥4,593
5	Kyoto University Kyoto	21,817	9.0	10.6	¥5,652
6	Hokkaido University Hokkaido	17,540	8.1	10.4	¥3,864
7	Kyushu University Fukuoka	18,566	7.8	11.7	¥4,093
8	Nagoya University Aichi	16,126	9.6	12.7	¥4,451
9	University of Tsukuba Ibaraki	15,507	12.5	15.9	¥4,241
10	Hiroshima University Hiroshima	14,700	8.2	10.4	¥3,208
11	Keio University Tokyo	33,197	10.4	8.1	¥3,257

HU ranks 3rd among Japanese universities in THE's Impact Rankings 2022



The British higher education journal *Times Higher Education (THE)* published its Impact Rankings 2022 — a list that assesses universities against the United Nation's Sustainable Development Goals (SDGs) — last April 28.

Hiroshima University (HU) placed 3rd in Japan with Keio University, Kobe University, Tohoku University, and the University of Tsukuba. For the overall ranking, HU ranked 101-200th among 1,406 universities worldwide. The overall ranking is calculated by combining the score in SDG 17 (Partnerships for the Goals) with the top three scores out of the remaining 16 SDGs.

■ Disaster (risk) management

- Impact of Farmers' Participation in Community-Based Organizations on Adoption of Flood Adaptation Strategies. A Case Study in a Char-Land Area of Sirajganj District Bangladesh.
- Cyclone-induced disaster loss reduction with the help of social media: A case study on cyclone Amphan in Koyra Upozila, Khulna District, Bangladesh
- Willingness to Pay Analysis of Agricultural Flood Insurance via a Randomized Conjoint Experiment: Evidence from Kampong Cham Province, Cambodia
- Analysis of Mt. Merapi Eruption 2010 and Economic Structure in Indonesia: A Multiregional Input-Output Approach

■ Energy consumption behavior; Pro-environmental behavior

- The Impact of Accessing to Electricity on Household's Welfare in Cambodia: Evidence from Propensity Scores Matching
- Intergenerational Transmission of School Education: Impact of Self-Monitoring on Household Electricity Consumption in Phnom Penh City
- Impact of Housing Tenure on Household Electricity Consumption: A Case Study in Major Cities of Vietnam
- Fuel for Work: Effects of Modern Cooking Fuel Adoption on Women Market Labor Supply
- Do Electricity Consumers Bunch at the Kink Point? Evidence from Accra, Ghana

■ Development Project

- The Optimal Power Control Grid -Connected Solar Farm With Battery Bank Systems: A Case Study of Kampong Speu Solar Farm, Cambodia
- The Effect of Financial Compensation for Farmland Acquisition on Household Welfare: Evidence from Yogyakarta International Airport (YIA) Development
- Predictors of Success for Public Sector Construction Projects in Afghanistan

■ Rural development

- Impact of Community Based leadership Approach (CBLA) in Increasing the Bovine FMD Vaccination Coverage in Dry Zone of Sri Lanka Evidence from a Randomized Controlled Trial in Uhana, Sri Lanka
- The Impact of Participation in Livestock and Market Development Program II on Private Veterinarians' Income, Service Quality Level and Mutual Trust with Farmers
- Rural Development and Sustainable Agriculture: A Case of Organic Farming in Issyk-Kul region of the Kyrgyz Republic
- Rural Household Preferences for a Resettlement Program in Nepal: A Randomized Conjoint Experiment in Sarumarani Rural Municipality Ward No-3, Pyuthan
- Impact of Government Training Programme on Application Behavior of Spice Farmers for Fairtrade Certification

■ **Transportation and Logistic Policy**

- The Impact of Taxi Permit Lottery on the 2015 Earthquake Victims of Nepal
- The Impact of Accession to the Eurasian Economic Union on the Development of Civil Aviation
- Geographical Condition and Port Development
- Valuing the Impact of Hypothetical Flight Attributes on Air Passengers Choice Preferences Using Randomized Conjoint Experiment
- The Impact of Hypothetical Parking Attributes on Commuters' Parking Decisions: Randomized Conjoint Field Experiment in Bishkek City, Kyrgyz Republic

■ Market and trade analysis

- Application of Machine Learning to Forecast of the Mongolian Stock Price
- Predictors of Mongolian Foreign Trade Performance
- The Dependence Structure of Stock and Oil Prices: The Case of African Stock Markets
- The Relationship between Manufacture Foreign Direct Investment in Indonesia and Indonesia's Bilateral Intra Industry Trade with Japan, China, and ASEAN-9
- Comparing Effect of Trade Agreements on Export Performance
- Industrial Estate, Firms' Productivity and International Trade Relationship: The Case of Indonesian Manufacturing Firms

■ Human Resource Management

- Impact of Career Guidance Program on Senior Secondary-Level Students in Sri Lanka
- The Dependence Structure of Stock and Oil Prices: The Case of African Stock Markets
- Career Feedback and Career Outcomes: The Moderating Role of Socioeconomic Status
- Second Language Training Transfer for Providing Bilingual Service by the Public Officials in Sri Lanka
- Valuing the Impact of Flexible Work Attributes on Private Sector Employees
Acceptance of Flexible Work Arrangements (FWAs) Strategy Using Randomized Conjoint Field Experiment in Colombo District, Sri Lanka

■ Potential demand analysis (Policy Marketing)

- Consumers Preferences for Online Shopping in Bangladesh: A Conjoint Approach
- Consumer Adoption of Mobile Financial Services (MFS) in Bangladesh: A Randomized Conjoint Experiment
- Valuing the Impact of Hypothetical Flight Attributes on Air Passengers Choice Preferences Using Randomized Conjoint Experiment
- Rural Household Preferences for a Resettlement Program in Nepal: A Randomized Conjoint Experiment in Sarumarani Rural Municipality Ward No-3, Pyuthan
- Willingness to Pay Analysis of Agricultural Flood Insurance via a Randomized Conjoint Experiment: Evidence from Kampong Cham Province, Cambodia

■ Labor Supply

- Willingness for Foreign Employment in Nepal: Do monetary and Non-monetary Benefits and Costs Matter?
- Maternal Employment and Child Cognitive Outcomes in Indonesia
- Fuel for Work: Effects of Modern Cooking Fuel Adoption on Women Market Labor Supply

■ Banking and Finance

- Efficiency Analysis of Commercial Banks in Bangladesh: A DEA and Malmquist Index Approach
- The Dependence Structure of Stock and Oil Prices: The Case of African Stock Markets
- Asymmetric Linkages of Money Demand to Exchange Rate in Bangladesh
- Reproducibility Study of the Impact of International Remittances on Education: Evidence from Bangladesh

■ Macroeconomic Growth

- The Relationship between Government Education Expenditure and GDP Growth or Labor Mobility

■ **Business start-up, small and medium-sized enterprises**

- Decomposition Analysis of Entrepreneurial Activity in Japan: An International Comparison
- Entrepreneurial Propensity to Business Start-up: Evidence from Asia
- Resource Misallocation and Decomposition in Vietnam Small and Medium-sized Enterprises

■ Education

- The Impact of High School New Curriculum Reform on People's High Educational Attainment, Marriage and Happiness in China
- Parental Absence and Welfare of the Children in Sri Lanka: Coarsened Exact Matching Approach
- The Effect of Social Rehabilitation Services for Children with Disability on School Attendance in Mongolia

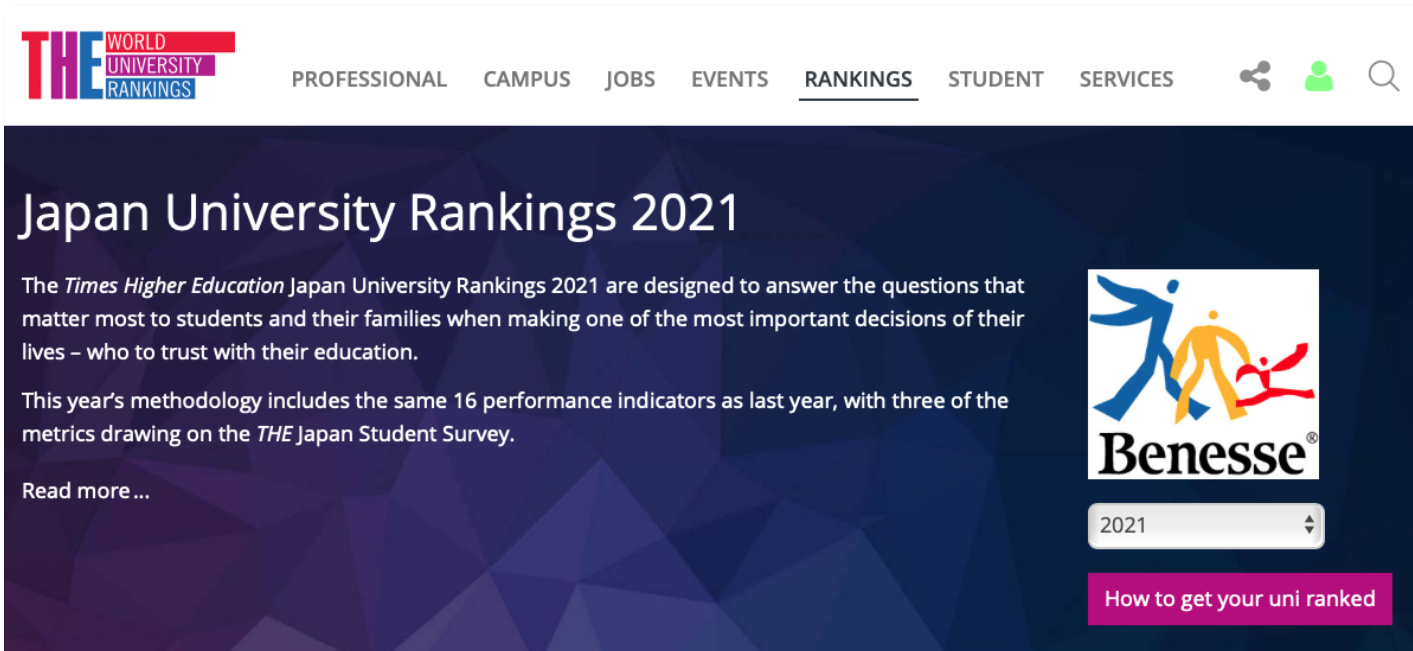
■ Corruption

- Corruption and Foreign Investment: Experimental Evidence from Mongolia

■ Public Health Care and Household Behavior

- The Causal Impact of Covid-19 Partial Lockdown Policy on Urban Water Consumption: Evidence from a Difference in Difference Analysis in Accra, Ghana
- Impact of Community based Nutrition Program on Health Status of Children in Nepal
- Reverse Intergenerational Transmission of Knowledge and Experience on Product Purchasing Behavior: Case of Alcohol Gel Hand Sanitizer in Cambodia
- Will Consumers Pay to Improve Public Water Supply Service? A Case Study of Kathmandu

HU ranks in Top 10 of THE Japan University Rankings 2021




THE WORLD UNIVERSITY RANKINGS PROFESSIONAL CAMPUS JOBS EVENTS RANKINGS STUDENT SERVICES

Japan University Rankings 2021

The *Times Higher Education* Japan University Rankings 2021 are designed to answer the questions that matter most to students and their families when making one of the most important decisions of their lives – who to trust with their education.

This year's methodology includes the same 16 performance indicators as last year, with three of the metrics drawing on the *THE* Japan Student Survey.

Read more ...



2021

How to get your uni ranked

Rank	Name Country/Region	No. of FTE Students	No. of percentage per split	International Students	Finance per 1000 Students
1	Tohoku University Miyagi	17,812	12.4	14.3	¥5,359
2	Tokyo Institute of Technology Tokyo	9,878	9.5	16.9	¥4,721
3	The University of Tokyo Tokyo	26,143	7.7	15.2	¥7,646
4	Kyoto University Kyoto	22,268	9.2	11.7	¥5,398
5	Osaka University Osaka	22,451	7.8	10.8	¥4,444
6	Hokkaido University Hokkaido	17,660	8.1	10.8	¥3,844
7	Nagoya University Aichi	16,376	7.5	13.4	¥4,351
8	Kyushu University Fukuoka	18,619	7.8	11.7	¥4,117
9	University of Tsukuba Ibaraki	16,525	13.3	12.6	¥3,850
10	Hiroshima University Hiroshima	15,052	8.7	12.0	¥3,127
11	International Christian University Tokyo	2,941	13.3	13.2	¥3,084
12	Keio University Tokyo	32,893	9.7	9.8	¥3,089
13	Waseda University Tokyo	47,577	14.4	13.2	¥2,221