# RIETI

Research Institute of Economy, Trade and Industry, IAA

# **Annual Report**

April 2019 - March 2020



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### Abbreviations

RIETI : Research Institute of Economy, Trade and Industry, IAA
METI : Ministry of Economy, Trade and Industry
CRO : Chief Research Officer
SA : Senior Advisor
SRA : Senior Research Advisor
PD : Program Director
SF : Senior Fellow
F : Fellow
FF : Faculty Fellow
CF : Consulting Fellow
VF : Visiting Fellow
VS : Visiting Scholar
RC : Research Coordinator
RAs : Research Associate



# About RIETI

The Research Institute of Economy, Trade and Industry (RIETI), an incorporated administrative agency, was established on April 1, 2001 to conduct extensive policy research and formulate policy recommendations. Leveraging its location in Kasumigaseki, RIETI takes full advantage of the synergy among policymakers, researchers, industry leaders, and other stakeholders, and has developed an excellent reputation both in Japan and abroad for its evidence-based, theoretical and empirical research, and its recommendations on a diverse array of issues regarding the economy, industry, and society.

RIETI has set up an overall framework of research themes to respond to policymaking needs. Within this overall framework, fellows undertake their own research in a free atmosphere, building organic linkages with other current research. Furthermore, RIETI incorporates the knowledge and insights of outside experts into its research through symposiums and other forums. In order to effectively and efficiently disseminate the research findings and promote policy recommendations, RIETI makes proactive use of various tools such as websites, public relations magazines, and publications.

For the realization of a flexible and interdisciplinary research environment, a diverse group of fellows are engaged in research at RIETI. In addition to full-time fellows, RIETI also appoints part-time fellows consisting of Faculty Fellows who concurrently hold positions at universities and Consulting Fellows who belong to other organizations such as administrative agencies while participating in research.

Nine programs have been set under RIETI's research framework, and leading experts in respective fields serve as program directors and supervise multiple projects.

The world is changing at a blistering pace. To deal with these changes and build a Japanese society that is mature as well as energetic, Japan, more than ever, needs to craft policy backed by research that breaks out of conventional frameworks. RIETI will continue to efficiently and effectively provide theoretical backing and extend knowledge networks to authorities in their policy formulation. We will continue to work toward our mission of strengthening and improving the quality of policymaking capacities and helping to invigorate policy discussions. As of April 1, 2020, I was appointed Chairman of RIETI. I am truly humbled to assume this position as the successor to my predecessor, Chairman Nakajima, who spearheaded many great achievements over the past nine years and stepped down at the end of March.

In the midst of the current novel coronavirus (COVID-19) pandemic, the social situation of tomorrow has the potential to be entirely different from that of today. In light of this uncertainty, I am determined to contemplate what we should do now with RIETI officers and employees and make every effort to select the best course of action for the Institute.

As can be seen from examples in other countries, the virus infection itself is unlikely to come to an end soon. In this sense, it is necessary to develop future plans assuming various scenarios, including one where an explosive rise in infections begins, and one where COVID-19 infections do not subside until this autumn, or this winter. Even if the pandemic dies down, the disease will not truly be overcome until effective drugs and vaccines are developed.

There is no end to the number of worst-case scenarios that are available for consideration. However, RIETI has a duty as a leading policy think tank and policy research institute in Japan and Asia, and we must fulfill and further expand that duty. To this end, we need to think hard about our current and future courses of action.

To put it simply, social science is an academic discipline that studies how to use goods and how to create systems to use them. I believe a pressing issue for RIETI as a research institute concerned with social science is to enhance its capabilities as a virtual organization. This means utilizing online meetings, seminars, lectures, and workshops via the internet to expand its information networks. Japan is lagging behind not only Western countries but also China and South Korea in terms of the nation's implementation and use of online resources. For example, with the outbreak of COVID-19, many U.S. universities are rapidly moving to online lectures. As a social science research institute, I believe that RIETI must be an organization that tests and drives efforts to enhance Japan's system for virtual organizations. For the greater development of social science, it is essential to share our understanding of issues through clear communication and to invent our own unique solutions to addressing the issues.

RIETI's Fifth Medium-Term Plan positions the integration of humanities and sciences as a pillar of its research activities. Japan's science and technology policy has long been based on the



belief that science and technology need to be studied only by scientists. The Basic Act on Science and Technology stipulates that its purpose is to promote the hard sciences that are not concerned with the humanities, and accordingly social science has been put aside. Since my tenure as a professor at Kyoto University, I have been encouraging relevant people to revise the Act to include the humanities and the social sciences in its scope, and my desire has finally been realized. At the same time, it is my great pleasure to be engaged in economics research that includes a new perspective focusing on the integration of humanities and sciences as a mission of the policy research institute, as well as the promotion of evidence-based policy making (EBPM) and data maintenance and utilization as a policy think tank, together with you all.

I am committed to working with you to overcome the current difficulties and contribute to establishing a more advanced society. I would like to ask for your cooperation in this endeavor.

April 2020 YANO Makoto, Chairman

This year marks the 20th anniversary of the founding of RIETI. It is now recognized from home and abroad as a representative policy research institute for its contribution to policymaking, the quality of research publication, and dissemination of socially-important insights. A long-term accumulation of steady efforts is essential to gain recognition as a research institute. During the past 11 years when I was involved in the management of RIETI as Vice President, I truly felt that RIETI in its current form is built on the achievements accumulated since its foundation. Therefore, I believe it desirable to continue to maintain our basic framework while fine-tuning it in response to social and economic conditions, changes in policy needs, and research trends.

RIETI aims to achieve two goals simultaneously: contributing to better policy formation through bridging policy practices and academic research as well as producing research findings of high academic value. Looking ahead to the progress that can be made in improving policymaking it is necessary to foster many government officials that are also equipped with a greater understanding of academic research. Meanwhile, researchers have much to gain from the field of policymaking, which is full of inspiration and material for unique research. For the spread of evidence-based policy formation, it is ideal that policy practitioners and academic researchers formally and informally interact and collaborate together. In my opinion, expanding their points of contact is one vital role of RIETI. However, this role is best served by creating effective synergies through sharing an awareness of issues while maintaining an appropriate distance to maintain neutrality of research.

If I have any comparative advantages, they would probably be my long-term

engagement in both policy practices and academic research as well as my parallel engagement in management responsibilities and my own research activities. My ability to understand the mindset and concerns of administrative officials, the motivations of researchers, and organizational management practices could be helpful. From that standpoint, I am committed to undertaking coordination that helps deepen cooperation between (1) policy practitioners and researchers, (2) RIETI researchers and external researchers



from universities, and (3) researchers and management/staff at RIETI.

Immediately before entering our Fifth Medium-Term Plan period, a serious socio-economic challenge arose in the form of the novel coronavirus (COVID-19) pandemic. This has posed significant restrictions on RIETI's activities and is likely to continue to disrupt plans for the foreseeable future. Furthermore, in addition to this pandemic, other unexpected shocks could occur going forward. It is important for us as a policy research institute to maintain an adequate amount of nimble flexibility in responding to emerging challenges rather than to focus simply on implementing activities planned far in advance.

April 2020 MORIKAWA Masayuki, President and CRO

# **Overview of FY2019 Activities**

FY2019 marked the final year of RIETI's Fourth Medium-Term Plan (FY2016-2019). Our mission in the Fourth Medium-Term Plan was to contribute to economic and industrial policy by proposing evidence-based policy measures using the research network that we have developed over the years to address the rapidly progressing "tectonic shifts" which are affecting the economy: a growing population decline due to dwindling birthrates and aging population; the Fourth Industrial Revolution brought about by technological innovation; the deepening of the TPP and other economic partnerships and the progress and competition in global rulemaking.

In order to accomplish our mission in FY2019, RIETI has conducted research and implemented multidisciplinary studies on interrelated research topics traversing a wide range of topics within our research framework, which is comprised of nine separate research programs. RIETI has also enhanced its partnerships with researchers from private sector research institutions as well as Japanese and foreign corporate professionals through personnel exchanges and other avenues, and proactively disseminated our research findings. The following is an overview of RIETI's research and dissemination activities in FY2019.

# 1. Research Activities

RIETI conducts research in line with our nine programs and takes a multidisciplinary approach to other research (Special Projects) in fields outside the purview of these programs.

R	esearch Programs in FY2019	Program Director	Number of Research Projects
I	Macroeconomy and Low Birthrate / Aging Population	KOBAYASHI Keiichiro, Fl	- 8
Ш	International Trade and Investment	TOMIURA Eiichi, FF	7
	Regional Economies	HAMAGUCHI Nobuaki, F	F 8
IV	Innovation	NAGAOKA Sadao, FF	4
V	Industry Frontiers	OHASHI Hiroshi, FF	11
VI	Raising Industrial and Firm Productivity	FUKAO Kyoji, FF	6
VII	Human Capital	TSURU Kotaro, FF	7
VIII	Law and Economy	YANO Makoto, President and CRO (Acting Program Director)	4
IX	Policy History and Policy Assessment	TAKEDA Haruhito, FF	4
SP	Special Projects		6
Tota	al Number of Research Projects		65

We exchange views with policymakers from the outset when research projects are being established to ensure that the research results can be applied to policy decisions and to maximize their utility for policymakers. Furthermore, researchers, including RIETI's Chairman and Vice President, exchange views with policymakers on issues pertaining to new policies and provide expertise that extends beyond the research project framework.

In addition, to enhance the quality of our research, RIETI emphasizes engaging in thorough discussions not only within our institute, but also with policymakers and experts both from within Japan and around the world. More specifically, when a research project is launched, brainstorming workshops (BSWS) are held to review proposed research plans, and, again at the final stage, review sessions are convened when paper drafts are completed to allow participants to exchange comments and deliberate on the content. Moreover, researchers from Japan and other countries are invited to workshops and other events hosted by RIETI where they engage in discussions that delve into specific, specialized topics.

As a result, we published a total of 222 research papers, of which 179 are theoretical, analytical, and empirical discussion papers (DPs), 43 are policy discussion papers (PDPs), which are published in a timely manner and are highly relevant to a variety of policy issues currently being tackled. RIETI endeavors to convey the policy significance of these research papers in a more communicative style by preparing and releasing "non-technical summaries," which accompany DPs and provide details on policy implications based upon the analytical results, so that our research results may impact the formulation of policy.

Attesting to the high quality of RIETI's scholarly research, 53 of our research pieces were published in internationally recognized, peerreviewed English-language journals and other specialized publications.

Beyond this, RIETI research results have been cited in a variety of white papers, official council data, and other material. Examples include the use of research results regarding structural changes in firm dynamics and structural changes in Japanese firms in the White Paper on Small and Medium Enterprises in Japan; the use of research results regarding China's industrial and trade policies, and regional innovation systems in the White Paper on International Economy and Trade; and the use of research results regarding the economic impact of introducing cloud service in Japan, and the impact of AI on employment and firm productivity in the White Paper on Information and Communications in Japan. Databases provided by RIETI have also been utilized, including the RIETI Trade Industry Database (RIETI-TID), Japan Industrial Productivity Database (JIP Database), and the Japan Economic Policy Uncertainty Index. Additionally, our research fellows have been participating in METI's big data project since 2016 and have worked on the development of new indicators. These indicators are widely used and are published on the BigData-STATS Dashboard (Beta) which is found at https://www.meti.go.jp/statistics/bigdata-statistics/ bigdata\_pj\_2019/index.html.

RIETI also entered into a collaborative research agreement with Tohoku University in 2018 and deepened mutual cooperation in research on societal issues such as earthquake disasters and the dwindling birthrate and aging population through joint studies, personnel exchanges, and use of facilities.

# 2. Public Relations Activities

A total of 27 public symposiums, seminars, and other events were held during the year, to which experts both from Japan and other countries were invited in order to provide a forum for deliberating important policy proposals that make use of the latest research.

# (1) Research Dissemination

In FY2019 RIETI hosted symposiums and seminars on a broad range of topics such as evidence-based policy making (EBPM) and blockchain in order to disseminate the research results of each project and stimulate public debate.

### RIETI Blockchain Symposium

### October 7, 2019

# Next Blockchain: Creation of a new ecosystem for future industries

Blockchain is a technology that enables safe and secure data transactions by registering data in "ledgers" that are irrevocable. While crypto currency receives the most coverage in the media as a use of blockchain technology, there is a vast range of uses for the technology due to its ability to secure any form of digitizable business or other transaction, in areas ranging from healthcare to preference data analysis. It is thought that it will have more impact on society than the internet as an "infrastructure" in fostering new industries. However, on the other hand, there are rising concerns about data hoarding of giant global platformers and the possible disrupting effect of blockchain technology on national monetary policies.

Based on this, RIETI has been conducting various front-line research studies and analyses related to blockchain technology. In this symposium, in addition to President Yano presenting our research results, we hosted a panel discussion with various top-level panelists from different backgrounds. Through these programs, we discussed ideal ways of utilizing blockchain technology as a system for fostering next-generation industries.

# https://www.rieti.go.jp/en/events/19100701/info.html



### **RIETI Policy Symposium**

# The Fourth Industrial Revolution and Japan's Economic Outlook

One concern for developed countries such as Japan is the long-term economic stagnation associated with a decrease in the growth of productivity. Given this, RIETI conducted research through the Fourth Medium-Term Plan (April 2016 to March 2020) on the following priority themes: cultivating Japan's strength in the world economy, making Japan an innovation-generating country, and overcoming population decline. Their key findings were published in *The Fourth Industrial Revolution and the Japanese Economy: Sustained Growth under a Transforming Economy and Society* (University of Tokyo Press).

How do we link AI, robotics and other elements of the Fourth Industrial Revolution to a new path of growth for the Japanese economy? In this symposium, key Japanese economists from different related fields met in one place and developed policy recommendations based on RIETI's most recent research findings relevant to this question. https://www.rieti.go.jp/en/events/20022601/info.html

\* The event was held without an audience due to the spread of COVID-19.



# (2) International Partnerships

RIETI has been working to foster international partnerships to address timely global issues through exchanges with various research institutions and international organizations around the world.

Our efforts toward establishing international policy proposals were aligned with the proposals at the G20 Osaka Summit (June 2019). Of the 10 task forces leading Think20 (T20), one of the G20 Summit's official engagement groups, RIETI administered two task forces the Trade, Investment, and Globalization Task Force and the SME Policy Faced with Development of Financial Technology Task Force and then prepared and submitted policy recommendations to the government as contributions to the G20.

Regarding our interaction with overseas research institutions, since 2007 RIETI has been partnering with the Centre for Economic Policy Research (CEPR), one of the world's top economic think tanks. In March 2020, we hosted a CEPR-RIETI Webinar entitled Economics in the Time of COVID-19: The economic impact on Asia. Additionally, we have been working with CEPR in disseminating information since 2012: for example, columns and other materials by RIETI have been published on VoxEU.org, the policy portal site operated by CEPR. Some columns by VoxEU.org on timely topics such as protectionism and economic uncertainty have also been reposted on the RIETI website.

Furthermore, we organized a workshop in October 2019 on protectionism and supply chains with our research partners, the Taiwan Institute of Economic Research (TIER) and the Korea Institute for Industrial Economics and Trade (KIET). In November, RIETI and the Australian National University's Australia-Japan Research Centre (ANU AJRC) hosted a symposium to discuss how to formulate rules on economic security and trade in Asia amidst the deepening trade conflicts between the United States and China.

Moreover, during FY2019, we signed a memorandum of understanding (MOU) on research cooperation with the Institute of Japanese Studies, Chinese Academy of Social Sciences (IJS/CASS) in June and the Mongolian National Development Agency (NDA) in December, elevating RIETI's status as a research platform in Northeast Asia.



The handover ceremony to submit the Think20 (T20) policy briefs on Trade, Investment and Globalization Task Force to the Japanese government officials in charge of G20 Japan (April 9, 2019).



RIETI signed a MOU with the Mongolian National Development Agency (NDA). Bayarsaikhan Banzragch (Chairman, NDA, left), and Atsushi Nakajima (Chairman, RIETI, right)

### **RIETI-ANU Symposium**

# Asian Integration and the Global Economy: Economics of geopolitics

As the United States and China—the world's two strongest economic and military powers—engage in trade conflicts, other countries, especially countries in the Asian region, are forced to make difficult choices in terms of both economic and security policies.

In this symposium, co-hosted by RIETI and Australian National University (ANU), we raised questions and debated issues concerning trade/investment and technology transfer/security in the Asian region. The panel was comprised of three economic/public policy experts including former senior government officials invited from Australia, and four Japanese panelists including senior government officials and academic experts.

https://www.rieti.go.jp/en/events/19112101/info.html

# (3) Collaboration with the Ministry of Economy, Trade and Industry (METI)

In FY2019, RIETI held symposiums with METI policymakers on key policy topics such as group governance and EBPM.

# METI-RIETI Policy Symposium

### September 2, 2019

# Corporate Governance for Global Companies: Toward an increase in corporate value

The Corporate Governance Systems Study Group (CGS Study Group) at METI formulated and published the Practical Guidelines for Group Governance Systems (Group Guidelines) in June 2019 and demonstrated the significance of group governance in a growth strategy as well as outlined the perspectives and challenges when practicing group governance.

At this symposium, Professor Hideaki Miyajima, who is a member of the CGS Study Group and who serves as the leader of RIETI's Frontiers in Corporate Governance Analysis project, explained the results of his research on the topic. In addition, panelists with expert knowledge in this field, including researchers, practitioners, lawyers and administrators, held discussions on the role of corporate governance in increasing corporate value over the medium- to long-term and achieving sustainable growth.

https://www.rieti.go.jp/en/events/19090201/info.html



### December 25, 2019

# **To Advance Evidence-Based Policy Making**

The promotion of evidence-based policy making (EBPM), in which policies are formulated and evaluated rationally and logically based on evidence, is set forth as a component in the government's "Basic Policy on Economic and Fiscal Management and Reform *(Honebuto no Hoshin).*" Its importance is expected to increase into the future in central government agencies and local governments. RIETI has been focusing on the importance of EBPM from its onset and has been advancing the Establishing Evidence-Based Policy Making in Japan research project since February 2017. In this symposium, leading experts discussed the examples of applying EBPM toward energy issues and disaster prevention challenges—one of the research outcomes of that project—and the relationship EBPM may have with future challenges, such as AI-based big data analysis and the eradication of risks concerning improper statistics in politics and public administration.

# https://www.rieti.go.jp/en/events/19122501/info.html



# (4) Brown Bag Lunch (BBL) Seminars

BBL Seminars, which take place during lunch breaks, feature domestic and overseas experts as lecturers and offer a forum for discussing various policies with policymakers, academics, journalists and diplomats. In FY2019, 51 BBL Seminars were organized to cover timely and diverse themes such as innovative technologies (e.g., blockchain, machine learning and 5G), social innovations (e.g., libraries that support businesses, social investment), small- and medium-sized business financing and the startup ecosystem, safety and security (e.g., climate change, national defense), and trade-related issues (e.g., U.S. politics, the Chinese economy, WTO reform). (See "BBL Seminars" on P.83)

### July 30, 2019

# Trump's Trade Wars: Where do we stand?

### Alan V. DEARDORFF

(John W. Sweetland Professor of International Economics and Professor of Public Policy, University of Michigan)



### October 17, 2019

# The G20 and the World Economy: Performance and prospects

Dale W. JORGENSON (Samuel W. Morris University Professor, Harvard University)



### November 28, 2019 -

# **The Technological Forefront of Quantum Computing** KAWABATA Shiro

(Group Leader, Nanoelectronics Research Institute, National Institute of Advanced Industrial Science and Technology (AIST) / Sub-program Director, Quantum Information Processing Area, Quantum Leap (Q-LEAP) Project, MEXT)

### **ARIMA Nobuaki**

(Director, Device Industry and Digital Consumer Electronics Strategy Office, Commerce and Information Policy Bureau, METI)



### December 10, 2019 -

# Causal Machine Learning: From 21st century web industry to 22nd century public policy

# NARITA Yusuke

(VF, RIETI / Assistant Professor, Yale University / Visiting Assistant Professor, Stanford University / Co-founder, Jinch Inc.)



### January 22, 2020

# Big Data and Public Statistical Surveys: Creation, communication, and utilization

### KONISHI Yoko

(SF, RIETI / Specially Appointed Professor, Graduate School of Economics, Osaka University)



# (5) Publications

RIETI's research results were published in the form of five book compilations in FY2019. (See the list of "Publications" on P.64)



Gender Inequalities in the

Japanese Workplace and

**Theories and Empirical Evidence** 

Written by YAMAGUCHI Kazuo (VF)

**Employment:** 

# "End-of-life Satisfaction" in a Super-aged Society with Compassionate Capitalism from Japan

Written by FUJI Kazuhiko (SF)





### Next Blockchain: Creation of a new ecosystem for future industries

Written and edited by YANO Makoto (President and CRO), Chris DAI, MASUDA Kenichi, KISHIMOTO Yoshio



Written and edited by TSURU Kotaro (FF)





### The Fourth Industrial Revolution and the Japanese Economy: Sustained Growth under a Transforming Economy and Society

Edited by YANO Makoto (President and CRO)

# (6) PR magazine—RIETI Highlight

*RIETI Highlight*, a PR magazine introducing RIETI's major activities, is published in Japanese on a quarterly basis, with a special Englishlanguage edition published annually. Each edition presents topics of a timely nature in the "special feature," and the topics covered in the FY2019 quarterly editions included "Uncertainty and the Global Economy, " "The Free Trade System and SME Policies in the Digital Era," "Global Corporations and Their Growth Strategy," and "EBPM." The special English-language edition was published twice in FY2019: the August 2019 edition featured Think20 (T20), and the March 2020 edition summarized RIETI's activities in FY2019, especially its key projects and research results, and symposiums and seminars in which eminent researchers participated. (See "PR Materials" on P.67)



# (7) Website

The RIETI website is published in three languages: Japanese, English, and Chinese. It offers a steady stream of the latest information on RIETI activities—notices of symposiums and seminars, newly released research papers and non-technical summaries, columns by fellows, columns by renowned researchers entitled "Perspectives from Around the World," and more. The website is also formatted for mobile devices such as smartphones.

The topics that particularly interested our online visitors in FY2019 included macroeconomics, startups, EBPM, innovation, and risk management. We are also taking advantage of the growing variety of publication tools to publicize our research findings on platforms such as Facebook and through an RSS feed service that notifies subscribers of newly-released information for each specified policy category with a short e-mail. (See "Website" on P.66)



Website (https://www.rieti.go.jp/en/)



Facebook (https://www.facebook.com/en.RIETI)

# **Research Framework for RIETI's Fifth Medium-Term Plan**

# (FY2020 to FY2023)

In the Fifth Medium-Term Plan period, RIETI will add research on the Fourth Industrial Revolution and a behavioral economic approach (which has been gaining popularity and credibility) to the AI-related research (e.g., using AI to analyze corporate performance and consumer behavior) it has promoted to date. The scope of this research creates opportunities for the participation of researchers in science disciplines outside economics and will gradually enable the establishment of a system that allows for integration of the humanities and sciences, including linkages between research in multiple disciplines and social science/economics. Additionally, RIETI will promote research on evidence-based policy making (EBPM) (which is expected to become even more important in the future) to contribute to developing solutions to increasingly diverse and complex economic and social issues toward the formulation of economic and industrial policies.

Guided by medium- and long-term policy directions from the government, including its economic and industrial policies, RIETI will continue to engage in research activities by working with experts in other areas to initiate integration between the humanities and sciences including linkages between research in multiple disciplines and social science/economics. In doing so, it will contribute to an evidence-driven transformation of economic and social systems.

Research Programs			
Macroeconomy and Low Birthrate / Aging Population	International Trade and Investment	Regional Economies	
Innovation	Industry Frontiers	Raising Industrial and Firm Productivity	
Human Capital	Integrated Research	Policy Assessment	

# **Research Process**

RIETI provides forums for discussion (e.g., brainstorming workshops and discussion paper / policy discussion paper seminars) and invites policymakers to these forums to improve the quality of our research and to build linkages between our research and policies.

Brainstorming Workshops (BSWS)

>

Discussion Paper (DP) / Policy Discussion Paper (PDP) Seminars

Launching of new research projects

Deepening the analysis of individual papers

Symposiums, Workshops, Seminars, Publication of DPs and PDPs, Book Publication

Dissemination of research findings

# **Research Activities**

# **Research Programs**

# List of Research Projects

- I Macroeconomy and Low Birthrate / Aging Population
- International Trade and Investment
- III Regional Economies
- IV Innovation
- V Industry Frontiers
- VI Raising Industrial and Firm Productivity
- VII Human Capital
- VIII Law and Economy
- IX Policy History and Policy Assessment
- SP Special Projects

# **Research Papers**

Discussion Papers (DP)

Policy Discussion Papers (PDP)

The List of Articles Published in Peer-reviewed Academic Journals

# List of Research Programs / Projects

# Program I Macroeconomy and Low Birthrate / Aging Population

Project	Titles	Project Leaders	Page
I - 1	Microeconomics, Macroeconomics, and Political Philosophy toward Economic Growth	KOBAYASHI Keiichiro, FF	12
I - 2	Exchange Rates and International Currency (FY2017)	OGAWA Eiji, FF	12
I - 3	Exchange Rates and International Currency (FY2019)	OGAWA Eiji, FF	13
I - 4	Economic Analysis of the Development of the Nursing Care Industry in China and Japan	YIN Ting, F	13
I - 5	Exploring Inhibition of Medical Expenditure Expansion and Health-oriented Business Management Based on Evidence-based Medicine	NAWATA Kazumitsu, FF	14
I - 6	East Asian Production Networks, Trade, Exchange Rates, and Global Imbalances	Willem THORBECKE, SF	14
I - 7	Individuals' Lifecycle Behavior and Macroeconomic Analysis under Demographic Aging: Effects of fiscal and social security policies	KITAO Sagiri, FF	15
I - 8	Robots, Labor and the Macroeconomy	FUJIWARA Ippei, FF	15

# Program II International Trade and Investment

Project	Titles	Project Leaders	Page
II - 1	Empirical Analysis of Corporate Global Activities in the Digital Economy	TOMIURA Eiichi, FF	16
II - 2	Research on Global Inter-firm Networks and Related Policies	TODO Yasuyuki, FF	16
II - 3	A Study of the Effects of Trade Policy: A microdata analysis of Japan from the 1990s to 2010s	URATA Shujiro, FF	17
II - 4	Analyses of Offshoring	ISHIKAWA Jota, FF	17
II - 5	Comprehensive Research on the Current International Trade/Investment System (pt. IV)	KAWASE Tsuyoshi, FF	17
II - 6	Studies on Foreign Direct Investment and Trade in Relation to FDI	JINJI Naoto, FF	18
II - 7	Studies on the Impact of Uncertainty and Structural Change in Overseas Markets on Japanese Firms	ZHANG Hongyong, F	19

# Program III Regional Economies

Project	Titles	Project Leaders	Page
Ⅲ - 1	Stable Development of Regional Economies under a Declining Population	HAMAGUCHI Nobuaki, FF	20
Ш - 2	An Empirical Study on Compact City: Evaluating place-based policies in Japan	KONDO Keisuke, F	20
Ш - 3	Innovation Enhancing Regional Economic Structure and Evolution of Cities	NAKAMURA Ryohei, FF	21
III <b>-</b> 4	Spatial Economic Analysis on Intracity Economic Activities and Interregional Economic Activities	TABUCHI Takatoshi, FF	21
Ш - 5	The Role of Regional Financial Institutions as the Core of the Local Economy and Regional Cooperation	YAMORI Nobuyoshi, FF	22
Ш-6	Dynamics of Inter-organizational Networks and Firm Lifecycle	SAITO Yukiko, SF	22
III - 7	Agglomeration-based Framework for Empirical and Policy Analyses of Regional Economies	MORI Tomoya, FF	22
Ш - 8	Spatial Economic Analysis on Urban and Regional Economic Activities	TABUCHI Takatoshi, FF	23

# Program IV Innovation

Project	Titles	Project Leaders	Page
IV - 1	Frontiers of Innovation Policy: Evidence from micro data	NAGAOKA Sadao, FF	24
IV - 2	Creation and Development of High-tech Startups	HONJO Yuji, FF	24
IV - 3	Study on System and Management of Global Data & AI Utilization—Toward the establishment of a global data supply chain	WATANABE Toshiya, FF	25
IV - 4	Digitalization and Innovation Ecosystem: A holistic approach	MOTOHASHI Kazuyuki, FF	26

# Program V Industry Frontiers

Project	Titles	Project Leaders	Page
V - 1	Policy Analyses on Industrial Organization	OHASHI Hiroshi, FF	27
V - 2	Study Group on Corporate Finance and Firm Dynamics (FY2017)	UESUGI lichiro, FF	27
V - 3	Study Group on Corporate Finance and Firm Dynamics (FY2019)	UESUGI lichiro, FF	28
V - 4	Development of New Indicators for Service Sector Analysis and EBPM	KONISHI Yoko, SF	28
V - 5	Globalization, Innovation, and Competition Policy	KAWAHAMA Noboru, FF	28

V - 6	Productivity Gaps and Industrial Competitiveness	NOMURA Koji, FF	29
V - 7	Japan's History of Thought on Agricultural Policy and Structural Reform of Agriculture	YAMASHITA Kazuhito, SF	29
V - 8	Macro & Micro Economics of Artificial Intelligence	MANAGI Shunsuke, FF	29
V - 9	Dynamics of Economy and Finance from the Economic Network Point of View	AOYAMA Hideaki, FF	29
V -10	Policy Issues on the Electricity Market Reform after 2020	HATTA Tatsuo, FF	30
V -11	Economic Growth and Fluctuations Under Population Decline	YOSHIKAWA Hiroshi, FF	30

# Program VI Raising Industrial and Firm Productivity

Project	Titles	Project Leaders	Page
VI - 1	East Asian Industrial Productivity	FUKAO Kyoji, FF	31
VI - 2	Microeconometric Analysis of Firm and Industry Growth	HOSONO Kaoru, FF	32
VI - 3	Research on Productivity-improving Capital Investment	MIYAGAWA Tsutomu, FF	32
VI - 4	Analysis of the Regional-Level Industrial Productivity and Regional Production Networks	TOKUI Joji, FF	32
VI - 5	Research on the Improvement in Resource Allocation and Productivity among the Healthcare and Education Service Industries	INUI Tomohiko, FF	33
VI - 6	Refinement and Analysis of the Regional-Level Japan Industrial Productivity Database: Analysis of regional industrial linkages and productivity	TOKUI Joji, FF	33

# Program VII Human Capital

Project	Titles	Project Leaders	Page
VII - 1	Reform of Labor Market Institutions	TSURU Kotaro, FF	35
VII - 2	Employment System Reform to Use Human Resources More Efficiently	OWAN Hideo, FF	35
VII - 3	Fundamental Research for Economic Growth and Productivity Improvement in Japan	NISHIMURA Kazuo, FF	36
VII - 4	Empirical Studies on Employment, Migration, and Family Issues of Foreigners in Japan	LIU Yang, F	36
VII - 5	Productivity Effect of HRM Policies and Changing Employment System	OWAN Hideo, FF	37
VII - 6	Fundamental Research for Economic Growth and Productivity Improvement in Japan	NISHIMURA Kazuo, FF	37
VII - 7	Research on Working-style Reform, Health and Productivity Management	KURODA Sachiko, FF	38

# Program VIII Law and Economy

Project Titles		Project Leaders	Page
VIII - 1	Frontiers in Corporate Governance Analysis (FY2017)	MIYAJIMA Hideaki, FF	39
VIII - 2	Frontiers in Corporate Governance Analysis (FY2019)	MIYAJIMA Hideaki, FF	39
VIII - 3	Evidence-based Policy Study on the Law and Economics of Market Quality	FURUKAWA Yuichi, FF	40
VIII - 4	Research on Political Behavior and Decision Making: Searching for evidence-based solutions to political challenges in the economy and industry	ONO Yoshikuni, FF	40

# Program IX Policy History and Policy Assessment

Project Titles		Project Leaders	Page
IX - 1	Industrial Revitalization and the Role of Finance: The history of Japanese economic policies in the 1990s-2000s	TAKEDA Haruhito, FF	41
IX - 2	Historical Evaluation of Industrial Policy	OKAZAKI Tetsuji, FF	41
IX - 3	Establishing Evidence-Based Policy Making in Japan	YAMAGUCHI Kazuo, VF	42
IX <b>-</b> 4	The Future Direction of Corporate Taxation	SATO Motohiro, FF	42

# Program SP Special Projects

Project Titles		Project Leaders	Page
SP - 1	Survey of International Trends and Discussions in Greenhouse Gas Emission Reduction Projects under the UN Framework Convention on Climate Change	KAINOU Kazunari, F	43
SP - 2	RIETI Data Management Project	SEKIGUCHI Yoichi, SF	43
SP - 3	Study on the Medium- to Long-term Social Security System	OSHIO Takashi, FF	43
SP - 4	Comprehensive Research on Evidence-Based Policy Making (EBPM)	SEKIZAWA Yoichi, SF	44
SP - 5	Research on New Technologies, Economic Growth, and Industrial Structure	NIREI Makoto, FF	44
SP - 6	Empirical Research on Policy Uncertainty in Japan	ITO Arata, F	44

# Program

# Macroeconomy and Low Birthrate / Aging Population



Program Director

# KOBAYASHI Keiichiro

Maintaining long-term growth has been a challenge for economies around the world, and Japan is facing a rapidly aging population ahead of that of other nations. We will conduct research that contributes to policies to maintain Japan's economic vitality as well as to the development of the global economy. Specifically, we will consider system infrastructure, such as the role of Asian currency baskets, and analyze trends in international finance and the global economy, and long-term deflation mechanisms, etc. Furthermore, we will conduct multifaceted and integrated research on the analysis of comprehensive panel data on the elderly, the direction of the comprehensive reform of the social security and taxation systems, policy proposals for economic recovery, fiscal consolidation, etc.

# Introduction of Research Projects

# I -1

# Microeconomics, Macroeconomics, and Political Philosophy toward Economic Growth

Project Leader / KOBAYASHI Keiichiro, FF

Project Period: December 11, 2017 - November 30, 2019

# < Overview >

We conduct comprehensive analysis of the policy measures that aim at enhancing economic growth in Japan. To this end, we focus on three aspects of policy analysis, i.e., microeconomics, macroeconomics, and political philosophy.

For the microeconomics aspect, based on the hypothesis that corporate governance affects aggregate productivity, we pursue efficient reform measures of the investment chain, which consists of asset holders, asset managers, and investees (business firms).

For the macroeconomics aspect, we analyze the hypothesis of secular stagnation using the standard neoclassical macroeconomic theory to find the policy implications for Japan and other developed economies.

Finally, for the political philosophy aspect, we pursue a framework for political decision making for a policy agenda, of which the time horizon exceeds one or two generations.

## < Major Research Results >

### Discussion Paper

 Effects of Experiencing the Role of Imaginary Future Generations in Decision-Making—A Case Study of Participatory Deliberation in a Japanese Town—(HARA, Keishiro; KITAKAJI, Yoko; SUGINO, Hiroaki; YOSHIOKA, Ritsuji; TAKEDA, Hiroyuki; HIZEN, Yoichi; SAIJO, Tatsuyoshi) DP 19-E-104

### Policy Discussion Papers

- Economic Models in the Aftermath of the Financial Crisis—The Deflationary Equilibrium and the Managed Growth of Debt (KOBAYASHI, Keiichiro) PDP 19-P-027
- Why has Deflation Continued under Extraordinary Monetary Expansion? (KOBAYASHI, Keiichiro) PDP 19-P-028

# I -2

# Exchange Rates and International Currency (FY2017)

Project Leader / OGAWA Eiji, FF

Project Period: July 3, 2017 - June 30, 2019

### < Overview >

In this project, we aim to develop the research conducted in our previous project "Exchange Rates and International Currency." Specifically, to provide broad policy recommendations, we set three themes: Exchange rates and currency system; invoice currency and exchange rate pass-through; and macroeconomic analysis of current account and trade structure. Furthermore, through publishing our original datasets (Asian Monetary Unit, Asian Monetary Unit Deviation Indicator, and Industry-specific Real Effective Exchange Rates), we open our research results to the public. Also, we make concerted efforts to publish our work in reputed academic journals.

# < Major Research Results >

- Discussion Papers
- Time-Variant Safe-Haven Currency Status and Determinants (MASUJIMA, Yuki) DP 19-E-048
- Invoice Currency Choice in Malawi's Imports from Asia: Is there any evidence of Renminbi internationalization? (LAPUKENI, Angella Faith; SATO, Kiyotaka) DP 19-E-060
- Pegging or Floating? A Regime-Switching Perspective of Asian Exchange Rate Practices (KEDDAD, Benjamin; SATO, Kiyotaka) DP 19-E-073
- Exchange rate pass-through on Japanese prices: Import price, producer price, and core CPI (SASAKI, Yuri; YOSHIDA, Yushi; OTSUBO, Piotr Kansho) DP 19-E-078
- Choice of Invoice Currency and Exchange Rate Risk Management: 2018 Questionnaire Survey of Japanese Overseas Subsidiaries (ITO, Takatoshi; KOIBUCHI, Satoshi; SATO, Kiyotaka; SHIMIZU, Junko; YOSHIMI, Taiyo) DP 19-J-042

# I -3

# Exchange Rates and International Currency (FY2019)

Project Leader / OGAWA Eiji, FF

Project Period: October 1, 2019 - September 30, 2021

## < Overview >

In this project, we aim to develop the research performed in our previous project "Exchange Rates and International Currency." In the previous project, to provide broad policy recommendations, we set three themes: Exchange rates and currency system; invoice currency and exchange rate pass-through; and macroeconomic analysis of current account, capital account and trade structure. In this project, we retain these three themes and deepen our research activities. Further, through publishing our original datasets (the Asian Monetary Unit, the Asian Monetary Unit Deviation Indicator and the Industry-specific Real Effective Exchange Rates), we open our research results to the public. Also, we will make utmost efforts to publish our research papers in appropriate academic journals.

### < Major Research Results >

### RIETI-IWEP-CESSA Joint-Workshop

"Current Issues in the World Economy: Exchange rate, invoice currency, price transmission and localization" (December 18, 2019) See P.82



# I -4

# Economic Analysis of the Development of the Nursing Care Industry in China and Japan

Project Leader / YIN Ting, F

Project Period: July 24, 2017 - June 30, 2019

### < Overview >

The super-aged society that Japan has been rushing toward with unprecedented speed is facing a new challenge. Under these circumstances, improving the productivity of the nursing care industry has been an extremely important political issue. China, Japan's neighbor with a huge potential demand for nursing care. shares the dual problems of rapid aging. It is a golden opportunity to export know-how on nursing care which has been accumulated to China. By constructing a database of both nations, this project presents several empirical analyses with the objective of devising possible solutions on top of clarifying the actual status. First, by constructing a comprehensive database of Japan's nursing facilities, we conduct efficiency analyses including an estimation on the output function by considering the quality and the price of care service. Then, based on the results of the above analyses. we compare with that of the other industries and clarify the differences among them, which can set policy recommendations for the future shape of the growth of the industry and for employment generation. Second, this project sheds light on the type of nursing care service preferred by China, how to set the prices and care worker payment, and the economic conditions facing assisted-living residents by conducting an online survey on the demands for nursing care via a conjoint method in Japan and China. All of these are very important and helpful to Japanese companies in entering the Chinese nursing care industry.

### < Major Research Results >

### Discussion Papers

- Regression Discontinuity Designs with a Continuous Treatment (DONG, Yingying; LEE, Ying-Ying; GOU, Michael) DP 19-E-058
- The Effects of the Macroeconomy on the Labor Supply and Mortality in Long-term Care Institutions in Japan (HANAOKA, Chie) DP 19-E-070
- Income Stratification of Potential Care Workers among Internal Migrants in China (OKUBO, Shoki; KAWATA, Keisuke; YIN, Ting; ZHONG, Renyao) DP 19-E-079
- Wage Stratification between Care Workers and Non-care Workers in Japan: Evidence from 2001-2017 (OKUBO, Shoki; KAWATA, Keisuke; YIN, Ting; XU, Zhaoyuan) DP 19-E-081
- Preference for Elder Policy: Evidence from a Large-scale Conjoint Survey Experiment (KAWATA, Keisuke; YIN, Ting; YOSHIDA, Yuichiro) DP 19-E-091
- Estimating Family Preference for Home Elderly-care Services: Large-scale Conjoint Survey Experiment in Japan (KANEKO, Shinji; KAWATA, Keisuke; YIN, Ting) DP 19-E-092
- Labor Productivity in the Japan's Home Help Industry: Evidence from Establishment-Level Data (SUZUKI, Wataru) DP 19-J-043

### Workshop

"RIETI 2019 International Workshop on the Development of the Nursing Care Industry in China and Japan" (May 24, 2019) See P.77



I -5

# Exploring Inhibition of Medical Expenditure Expansion and Health-oriented Business Management Based on Evidence-based Medicine

Project Leader / NAWATA Kazumitsu, FF

Project Period: August 7, 2017 - January 31, 2020

### < Overview >

Evidence-based medicine (EBM) is a paradigm which maintains that medical interventions and health promotion measures should be performed in line with evidence backed by reliable data and appropriate analyses rather than experts' opinions and subjective experiences. The idea of EBM has been spreading all over the world. In this project, we explore ways to inhibit the expansion of medical expenditures without harming human health and attain effective health-oriented business management based on EBM. We also conduct studies on how to improve mental health and deal with cognitive decline prevention properly based on EBM.

### < Major Research Results >

### Discussion Papers

- An Analysis of Medical Expenditures using Medical Checkups and Receipts using the Power Transformation Tobit Model (NAWATA, Kazumitsu; MORINO, Yuki; KIMURA, Moriyo) DP 19-J-025
- An Analysis of Blood Pressure and Medical Expenditures using the Medical Checkup and Receipt Dataset (NAWATA, Kazumitsu; MATSUMOTO, Akikuni; KIMURA, Moriyo) DP 19-J-031

# I -6

# East Asian Production Networks, Trade, Exchange Rates, and Global Imbalances

Project Leader / Willem THORBECKE, SF

Project Period: February 1, 2018 - January 31, 2020

### < Overview >

Intricate value chains have emerged centered in East Asia. This project investigates the roles that Japan, China, South Korea, Association of Southeast Asian Nations (ASEAN) countries, the United States, and other countries play within these networks.

Specific questions that it tackles include: 1) How do exchange rate changes, economic activity in the rest of the world, political considerations, and other factors affect exports from Asian countries and elsewhere; 2) How has the rise of China affected the rest of Asia and the rest of the world; 3) How have countries been able to advance to more complex products; 4) Do exchange rate changes affect exports of more complex products less than exports of other products; 5) How can Japan and East Asia deflect protectionist pressures that are threatening the world trading system; 6) To what extent are East and Southeast Asian country comrades, working together within production networks, and to what extent are they competitors, exporting similar products to third markets; 7) How sophisticated are exports from Japan, South Korea, Taiwan, China, and ASEAN, how close are the goods they produce to the technological frontier, and how they are progressing at moving up the ladder of comparative advantage; 8) What types of policies would promote growth and stability in Japan, Asia, and the rest of the world; 9) How have the rise of regional value chains, the Chinese economy, and other factors affected inflation in the world and the ability of central banks to hit their inflation targets; 10) What policy implications flow from the answers to the questions above.

### < Major Research Results >

### Discussion Papers

- Why Japan Lost Its Comparative Advantage in Producing Electronic Parts and Components (THORBECKE, Willem) DP 19-E-035
- East Asian Value Chains, Exchange Rates, and Regional Exchange Rate Arrangements (THORBECKE, Willem) DP 19-E-046
- Exchange Rates and Intra- and Inter-Firm Trade in Japan (KATO, Atsuyuki) DP 19-E-082
- China's Exports in a Protectionist World (THORBECKE, Willem; SALIKE, Nimesh; CHEN, Chen) DP 20-E-011
- Weathering Safe Haven Capital Flows: Evidence from the Japanese Transportation Equipment Industry (THORBECKE, Willem) DP 20-E-024
- Non-traditional Monetary Policy and the Future of the Financial Industries (THORBECKE, Willem) DP 20-E-025

# <u>I-7</u>

# Individuals' Lifecycle Behavior and Macroeconomic Analysis under Demographic Aging: Effects of fiscal and social security policies

## Project Leader / KITAO Sagiri, FF

Project Period: August 13, 2018 - July 31, 2020

## < Overview >

Japan will face rapid demographic aging during the coming decades. Policy debate should take into account economic analysis based on the medium to long-run projections of demographics, government expenditures, and revenues. It is critical to understand how individuals of different ages and socio-economic classes are affected by alternative policies and what are the implied trade-offs across generations. We build macroeconomic models based on individuals' lifecycle decisions and quantitatively analyze the effects of policies in the Japanese economy currently facing ongoing demographic transition. Our goal is to analyze the effects of policy changes on the aggregate economy and individual welfare by building a model that aligns with micro data and incorporates details of key policy institutions.

# < Major Research Results >

### Discussion Papers

- Dimensions of Inequality in Japan: Distributions of Earnings, Income and Wealth between 1984 and 2014 (KITAO, Sagiri; YAMADA, Tomoaki) DP 19-E-034
- Females, the Elderly, and Also Males: Demographic Aging and Macroeconomy in Japan (KITAO, Sagiri; MIKOSHIBA, Minamo; TAKEUCHI, Hikaru) DP 19-E-039
- Aging, Factor Prices and Capital Flows (BONFATTI, Andrea; İMROHOROĞLU, Selahattin; KITAO, Sagiri) DP 19-E-110

# I -8

# **Robots, Labor and the Macroeconomy**

Project Leader / FUJIWARA Ippei, FF

Project Period: December 16, 2019 - November 30, 2021

### < Overview >

Whether machines will take our jobs away is not a new concern, tracing back, at least, to about 200 years ago. Still, we have not observed significant decline in labor share to date. With significant progress in artificial intelligence and algorithms in machine learning, however, this concern is now becoming an ever-growing fear. Reflecting society's anxiety about the future and desire to understand the consequences of robotization, academics are tackling this issue from theoretical as well as empirical angles. There is a vast literature discussing possible future scenarios in a hypothetical world that employs the dynamic general equilibrium model. On the other hand, there exist only a few empirical studies on the effects of robotization on labor to date. In addition, the reported results from previous empirical studies are mixed. In this project, we investigate how the intensive use of robots have altered the labor market and the macro economy, and vice versa, using a new dataset and empirical strategies not employed in previous studies.

# Other Research Results in Program I

- < Research results independent from any research project >
- Policy Discussion Paper
- Why do we need economic growth? Macroeconomy and Low Birthrate / Aging Population (KOBAYASHI, Keiichiro) PDP 19-P-017
- < Research results belonging to research projects prior to FY2019 >

# Exchange Rates and International Currency

Project Leader / OGAWA Eiji, FF

Project Period: April 1, 2015 – March 31, 2017

### Discussion Paper

• Do Exchange Rates Matter in Global Value Chains? (SATO, Kiyotaka; ZHAN, Shajuan) DP 19-E-059

# Program



# International Trade and Investment



Program Director

**TOMIURA Eiichi** 

When considering Japan's economic policies in the midst of globalization, an understanding of international trade and foreign direct investment is even more important now than in the past. This program, focusing on the globalization of firm activities (i.e., exports and overseas production), will study the international trading networks of firms from theoretical and empirical perspectives, while also studying trade policies and international trade and investment rules from empirical and legal perspectives.

# Introduction of Research Projects

# **II-1**

# Empirical Analysis of Corporate Global Activities in the Digital Economy

Project Leader / TOMIURA Eiichi, FF

Project Period: May 22, 2017 - March 31, 2020

# < Overview >

This project empirically analyzes corporate globalization activities in the era of digitization. The primary target is the data gathering by a survey on Japanese firms for understanding the current state of cross-border data transfers. Based on firm-level data, we also analyze various globalization activities, such as exporting, foreign direct investment, offshore outsourcing, intra-firm trade, and trade intermediation.

< Major Research Results >

## Discussion Papers

- Effects of Regulations on Cross-border Data Flows: Evidence from a Survey of Japanese Firms (TOMIURA, Eiichi; ITO, Banri; KANG, Byeongwoo) DP 19-E-088
- Intra-firm Trade, Input-output Linkage, and Contractual Frictions: Evidence from Japanese Affiliate-level Data (MATSUURA, Toshiyuki; ITO, Banri; TOMIURA, Eiichi) DP 20-E-026

## Policy Discussion Paper

 Analyses of Trade Policy Preferences Based on Individual-level Data: Summary of Research Results from a RIETI Survey of 10,000 Individuals (TOMIURA, Eiichi; ITO, Banri; MUKUNOKI, Hiroshi; WAKASUGI, Ryuhei) PDP 20-P-006

# **II-2**

# Research on Global Inter-firm Networks and Related Policies

Project Leader / TODO Yasuyuki, FF

Project Period: July 10, 2017 - June 30, 2019

## < Overview >

This project aims to examine how global inter-firm networks, particularly networks of production, shareholding, and research collaboration, affect economic growth and resilience and what policies related to such networks can positively affect the economy, using large-scale, firm-level data for firms around the world. To utilize large-scale data and provide more useful policy implications, collaborative efforts on this project are made by economists, network scientists, simulation scientists, and policymakers.

# < Major Research Results >

### Discussion Papers

- Enterprise Resilience to Disasters: Who Needs Public Support? (KASHIWAGI, Yuzuka) DP 19-E-029
- Propagation of Positive Effects of Post-disaster Policies through Supply Chains: Evidence from the Great East Japan Earthquake (KASHIWAGI, Yuzuka; TODO, Yasuyuki) DP 19-E-030
- Are Politically Connected Firms More Likely to Export? (KIM, Yu Ri; TODO, Yasuyuki) DP 19-E-049

# **II-3**

# A Study of the Effects of Trade Policy: A microdata analysis of Japan from the 1990s to 2010s

Project Leader / URATA Shujiro, FF

Project Period: July 10, 2017 - June 30, 2019

# < Overview >

The objective of this research project is to investigate the impacts of trade liberalization on economic activities/performance in Japan and to provide the Japanese government with useful information for formulating trade policy. Recently, the importance of evidence-based policy recommendation has been emphasized, but to our surprise, the economic impacts of trade liberalization have not been analyzed by applying scientific approaches in the case of Japan. In light of these observations, we undertake this project in which the impacts of a reduction in tariff rates in the 1990s and those of the introduction of free trade agreements/ economic partnership agreements in the 2000s will be analyzed. Specifically, we are interested in discerning the impacts on trade, consumption, production, and employment.

# < Major Research Results >

## Discussion Papers

- Costs of Utilizing Regional Trade Agreements (HAYAKAWA, Kazunobu; JINJI, Naoto; MATSUURA, Toshiyuki; YOSHIMI, Taiyo) DP 19-E-054
- Tariff Pass-through in Wholesaling: Evidence from Firm-level Data in Japan (BAEK, Youngmin; HAYAKAWA, Kazunobu; TSUBOTA, Kenmei; URATA, Shujiro; YAMANOUCHI, Kenta) DP 19-E-064
- Import Competition and Product Churning: Evidence from Japanese Plant-productlevel Data (BELLONE, Flora; HAZIR, Cilem Selin; MATSUURA, Toshiyuki) DP 19-E-074
- Heterogeneous Impact of Import Competition on Firm Organization: Evidence from Japanese firm-level data (MATSUURA, Toshiyuki) DP 19-E-086
- Do Japan's Free Trade Agreements (FTAs) Increase Its International Trade? (ANDO, Mitsuyo; URATA, Shujiro; YAMANOUCHI, Kenta) DP 19-E-090
- Impacts of Increased Chinese Imports on Japan's Labor Market (HAYAKAWA, Kazunobu; ITO, Tadashi; URATA, Shujiro) DP 19-E-098

# **II-4**

# **Analyses of Offshoring**

# Project Leader / ISHIKAWA Jota, FF

Project Period: November 1, 2017 - October 31, 2019

# < Overview >

Offshoring (foreign direct investment and foreign outsourcing) has played a crucial role in recent globalization. Offshoring affects both domestic and foreign production, employment, research and development (R&D), etc. Thus, it is useful for policymaking to investigate both the determinants and effects of offshoring.

The objective of this research project is to explore offshoring to deepen the understanding of globalization and trade and industrial policies and obtain useful policy implications for the Japanese economy.

# < Major Research Results >

# Discussion Papers

- Do Domestic Producers Benefit from Safeguards? The Case of a Japanese Safeguard on Chinese Vegetable Imports in 2001 (TAKECHI, Kazutaka) DP 19-E-057
- Complementarity between Firm Exporting and Firm Importing on Industry Productivity and Welfare (ARA, Tomohiro) DP 19-E-065
- Tariffs, Vertical Oligopoly and Market Structure: Empirical Investigation (ARA, Tomohiro; ZHANG, Hongyong) DP 19-E-066
- Tariff Elimination versus Tax Avoidance: Free Trade Agreements and Transfer Pricing (MUKUNOKI, Hiroshi; OKOSHI, Hirofumi) DP 19-E-099
- Agglomeration of Low-productive Entrepreneurs to Large Regions: A Simple Model (FORSLID, Rikard; OKUBO, Toshihiro) DP 19-E-102
- Tax Havens and Cross-border Licensing (CHOI, Jay Pil; ISHIKAWA, Jota; OKOSHI, Hirofumi) DP 19-E-105
- The Margins of Intermediate Goods Trade: Theory and Evidence (ARA, Tomohiro; ZHANG, Hongyong) DP 19-E-109

# International Workshop

"Frontiers in Research on Offshoring" (August 2, 2019)

See P.78



# **II-5**

# Comprehensive Research on the Current International Trade/Investment System (pt. IV)

Project Leader / KAWASE Tsuyoshi, FF

Project Period: December 18, 2017 - November 30, 2019

# < Overview >

The main subject of this research project for this period is the development of multilateral rules on digital trade. The internet now is an indispensable means of trade in real goods and services, and in the age of the Industry 4.0, digital information including Big Data is subject to trade in the same manner as goods. Such transnational expansion of the digital economy compels urgent development of international rules that assure free and non-

discriminatory digital trade. The rules on this subject have been developed mainly in the context of regional economic integration (FTAs, EPAs), however, lately we have recognized the necessity for rule-making in multilateral forums, in particular, the WTO, for this purpose. Against this background, in this project, members will engage in basic research on digital trade rules, starting with studies on regulatory impediments to the free flow of data and comparative analysis of digital trade rules in FTAs/EPAs.

This project also continues the coverage of studies on the international economic law on competitive neutrality and WTO case law from the preceding period.

## < Major Research Results >

### Discussion Papers

- Generating a Reform of the BRI from the Inside: Japan's Contribution Via Soft Law Diplomacy (UMIRDINOV, Alisher) DP 19-E-076
- Competitive Neutrality of State-owned Enterprises in China's Steel Industry: Causal Inference on the Impacts of Subsidies (WATANABE, Mariko) DP 20-E-014
- Restrictions on outbound data transfer based on Government Access in foreign countries—The current situation, Regulation by International Trade Law and Implications for DFFT—(WATANABE, Shota) DP 19-J-067
- Regulation of Data Localization Measures in WTO Law (TOJO, Yoshizumi) DP 20-J-011

## Policy Discussion Papers

- [WT0 Case Review Series No.25] Indonesia—Measures Concerning the Importation of Chicken Meat and Chicken Products (WT/DS484): Interface between Halal Requirement and Free Trade (SEKINE, Takemasa) PDP 19-P-011
- [WTO Case Review Series No.26] European Union—Measures Affecting Tariff Concessions on Certain Poultry Meat Products (WT/DS492): Characteristics of the WTO Panel's Interpretation of Articles XIII and XXVIII of the GATT (HIRAMI, Kenta) PDP 19-P-014
- [WTO Case Review Series No.27] United States—Tuna Labeling Case (compliance procedure) (DS381/RW2): Article 2.1 of TBT Agreement and application of the "calibration" (HEIKE, Masahiro) PDP 19-P-032
- [WTO Case Review Series No.28] Indonesia—Importation of Horticultural Products, Animals and Animal Products (DS477/478): Limiting effect on importation and justifications regarding integral import measures, relationship between Agriculture Agreement Article 4.2 and GATT Article 11 (SHIMIZU, Mari) PDP 19-P-034
- [WTO Case Review Series No.29] Brazil—Certain Measures Concerning Taxation and Charges (DS472, DS497): Scope of the WTO law on Discriminatory Tax Exemption Measures (TOJO, Yoshizumi) PDP 19-P-037
- [WT0 Case Review Series No.30] United States—Measures Affecting Trade in Large Civil Aircraft (Second Complaint): Recourse to Article 21.5 of the DSU by the European Union—Subsidies of which Adverse Effects must be Eliminated (UMEJIMA, Osamu) PDP 20-P-001
- [WTO Case Review Series No.31] Russia—Measures concerning Traffic in Transit (DS512): Ambit of National Security Exception in GATT XXI (KAWASE, Tsuyoshi) PDP 20-P-004
- [WT0 Case Review Series No.32] United States—Conditional Tax Incentives for Large Civil Aircraft (DS487): Development of interpretation related to subsidies contingent upon the use of domestic over imported goods (KAWASHIMA, Fujio) PDP 20-P-010

# **II-6**

# Studies on Foreign Direct Investment and Trade in Relation to FDI

Project Leader / JINJI Naoto, FF

Project Period: April 2, 2018 - March 31, 2020

### < Overview >

This research project aims to analyze a number of issues related to inward and outward foreign direct investment (FDI), taking into account its relationship with trade in goods and services. The main topics in this project include (1) the effects of inward FDI promotion policies, (2) the relationship between labor market flexibility and FDI, (3) the effects of policy uncertainty on FDI, and (4) the role of general trading companies in outward FDI by small and medium enterprises. In those topics, this project pays attention to the effects of bilateral investment treaties and regional trade agreements on FDI, and uses analysis to try to provide a number of new findings on various factors that affect FDI and derive policy implications for Japanese inward and outward FDI.

# < Major Research Results >

### Discussion Papers

- Promotion or Liberalization: The Effect of Targeted Investment Policies on FDI Inflows (INADA, Mitsuo) DP 19-E-071
- FDI, Ownership Structure, and Productivity (ITO, Tadashi; TANAKA, Ayumu) DP 20-E-017
- To What Degree does Policy Uncertainty Affect Foreign Direct Investment? Microevidence from Japan's International Investment Agreements (INADA, Mitsuo; JINJI, Naoto) DP 20-E-022

# **II-7**

# Studies on the Impact of Uncertainty and Structural Change in Overseas Markets on Japanese Firms

Project Leader / ZHANG Hongyong, F

Project Period: November 5, 2018 - October 31, 2020

# < Overview >

In this project, we focus on the economic (policy) uncertainty and structural change in overseas markets and theoretically and empirically study three related sub-projects. First, we examine the impacts of U.S.-China trade war and increasing protectionism and uncertainty on international trade, investment and firms. Second, using firm-level data, we investigate the relationship between macro- and micro-level uncertainty and firm behavior including investment, employment and internationalization (both exports and FDI). Third, we analyze the structural change and impacts of trade liberalization on labor markets in major countries like the United States, China and Japan from a medium- and long-term perspective. The results are expected to provide evidence useful for the formation of economic, trade and industrial policy in Japan.

## < Major Research Results >

## Discussion Papers

- The Impact of the US-China Trade War on Japanese Multinational Corporations (SUN, Chang; TAO, Zhigang; YUAN, Hongjie; ZHANG, Hongyong) DP 19-E-050
- Learning from Siblings within Multinational Firms (CHEN, Cheng; SUN, Chang; ZHANG, Hongyong) DP 19-E-053

# **Other Research Results in Program II**

< Research results independent from any research project >

- Policy Discussion Paper
- The transformation of international trade and foreign direct investment in the Fourth Industrial Revolution (TOMIURA, Eiichi) PDP 19-P-018

# Program

# **Regional Economies**

Program Director

# HAMAGUCHI Nobuaki

This program will study the effect of international trade, movement of capital and labor, and changes in technology on urban and rural areas and industries, while viewing the regions of Japan in the context of the global economy and using this to develop proposals, etc. on such important policy issues as the aging population and regional revitalization. Specifically, we will consider policies to promote the features of export industries in regional areas and regional economic circulation, strengthen functions of regional financial institutions, create social institutions that utilize cutting-edge information technology and transport infrastructure, and utilize and strengthen international production networks (value chains), as well as create statistical indicators that conform with the structure of economic spaces, form policymaking frameworks, etc.

# Introduction of Research Projects

# **III-1**

# Stable Development of Regional Economies under a Declining Population

Project Leader / HAMAGUCHI Nobuaki, FF

Project Period: January 15, 2018 - December 31, 2019

# < Overview >

We analyze three main topics of the regional economies of Japan where the population is predicted to continue to decline for at least the next 100 years. These topics are the revision of regional spatial structure which has strengthened the Tokyo-monocentric concentration; enhancing the resilience of destabilized depopularizing regions; and internationalization of regional firms. This project is both an extension of and new development based on the results obtained from our previous projects in RIETI's Regional Economies program. The topic of the revision of regional spatial structure is related to the study on the regional spatial structure compatible with the positive effects of skilled labor turnover across regions on innovation outcomes. In relation to this topic, we study human capital development required especially in large cities for computerized working environments with the introduction of artificial intelligence. The resilience of regional economies focuses on the condition for the introduction of a business continuity plan (BCP) in small and medium-sized firms, with particular attention to the business relationship with

regional financial institutions. The study on the internationalization of regional economies analyzes the Kyushu region on topics such as networking through supply chains and retail sellers and business with Asian countries.

### < Major Research Results >

## Discussion Papers

- Current Status and Issues Regarding the Role of Financial Institutions in Promoting BCP Efforts: Based on RIETI's Business Consciousness Survey on Business Continuity Plans (BCP) (YAMORI, Nobuyoshi; HAMAGUCHI, Nobuaki; NODA, Kentaro) DP 19-J-037
- Industrial Agglomeration and Proliferation of Startup Firms in the Kyushu Region (HAMAGUCHI, Nobuaki; OKANO, Hideyuki; OSAJIMA, Shuzo) DP 20-J-003
- Policy Discussion Papers
- Results and discussion of business consciousness survey on business continuity plans (BCP) (NODA, Kentaro; HAMAGUCHI, Nobuaki; YAMORI, Nobuyoshi)
   PDP 19-P-007
- Current Situation and Issues in Utilization of Highly Skilled Foreign Professionals in Kyushu (MARUYA, Toyojiro; KUMON, Takashi; HAMAGUCHI, Nobuaki)
   PDP 20-P-005

# Ш-2

# An Empirical Study on Compact City: Evaluating place-based policies in Japan

Project Leader / KONDO Keisuke, F

Project Period: September 19, 2017 - August 31, 2019



# **Regional Economies**

### < Overview >

Japan faces a new phase of population decline, in addition to a declining birth rate and rapid population aging. In this situation, the compact city policy is an important concept to achieve high economic growth with efficient fiscal administration including sustainable urban and regional policies. The Japanese government has undertaken policies to revitalize city center districts, and thus there is a growing necessity for policy evaluation. This project aims to contribute to effective policymaking by evaluating these compact city policies that have played a central role in Japan using micro data of households and firms.

### < Major Research Results >

### Discussion Papers

- The Costs of Urban Agglomeration: Evidence from the Inbound Tourism Boom in Japan (KONDO, Keisuke) DP 19-E-106
- Effect of Central City Revitalization Policy on Commerce: Evidence from Establishment-level Data Analysis in Kumamoto (HONDA, Keiichiro; KAWANISHI, Takuya) DP 19-J-063
- Does Compact City Policy Benefit Incumbent Retailers? Evidence from Toyama City (IWATA, Shinichiro; KONDO, Keisuke) DP 19-J-069

# **III-3**

# Innovation Enhancing Regional Economic Structure and Evolution of Cities

Project Leader / NAKAMURA Ryohei, FF

Project Period: October 2, 2017 - September 30, 2019

### < Overview >

Based on previous research projects including "Advancement on Regional Economic Structural Analysis" which looked at wholesale productivity analysis, we continue with our current research. The topics addressed are as follows:

- Employment multiplier analysis of innovative industries and occupations by extension of the economic base model
- (2) New economic geography (NEG) simulation regarding regional income disparities and population distribution incorporating heterogeneity of labor in basic industry
- (3) Identification of exportable service industries and finding industrial structure generating innovation as a city
- (4) Generalization of a regional input-output (IO) model incorporating income flow between regions and regional tax effect focusing on regional economic circulation
- (5) Analyses on the distribution change of population/ establishment movement and the change of city productivity under the framework of a "proper location inducing plan"
- (6) Simulation of self-organization and urban revolution under the framework of economic base theory

- (7) Matching between manufacturing agglomerations and local trading companies as wholesalers, and productivity analysis and economies of scope
- (8) Verification of the innovation possibilities emanating from human diversity and networks

### < Major Research Results >

### Discussion Papers

- CEOs' Multicultural Experience, Firm Networks and Performance: Evidence from Firm-to-firm Transaction Data in Japan (ITO, Tadashi; NAKAMURA, Ryohei) DP 19-E-037
- An Interregional Input-Output Model for Estimating the Effects of Regional Revitalization Policy (ISHIKAWA, Yoshifumi) DP 19-J-062

### Policy Discussion Papers

- Analysis of Regional Multiplier of Knowledge Intensive Industries and Creative Jobs based on Economic Base Model: Benefit of Municipal Collaboration (NAKAMURA, Ryohei) PDP 19-P-025
- Differences between Wholesalers in Services and Trade Characteristics, and the Regional Characteristics of Export Profits: Analyzing the Results of Questionnaires (MORITA, Manabu; ISHIKAWA, Yoshifumi; NAKAMURA, Ryohei) PDP 20-P-002

# **III-4**

# Spatial Economic Analysis on Intracity Economic Activities and Interregional Economic Activities

Project Leader / TABUCHI Takatoshi, FF

Project Period: October 2, 2017 - September 30, 2019

### < Overview >

Urban and regional economies are closely related to international trade and labor markets. We analyze the factors of sustainable growth of cities and regions in the progress of globalization and the service economy with an aging society. We also investigate how different income classes and races are spatially distributed based on the spatial economic approach and analyze the factors of intercity and intracity economic differentials. Combined with economic geography, trade theory, transport economics, labor economics, and development economics, and developing new research areas, we aim to derive useful economic policy implications from welfare economic and social points of view.

### < Major Research Results >

### Discussion Paper

- Segregation and Public Spending under Social Identification (NAKAGAWA, Mariko; SATO, Yasuhiro; YAMAMOTO, Kazuhiro) DP 19-E-096
- Tokyo Workshop on Spatial Economics 2019
  "Frontiers in Urban Economics and Trade" (June 4, 2019)

See P.78

# Ш-5

# The Role of Regional Financial Institutions as the Core of the Local Economy and Regional Cooperation

Project Leader / YAMORI Nobuyoshi, FF

Project Period: January 15, 2018 - December 31, 2019

# < Overview >

In order to revitalize regional economies, it is essential to improve the competitiveness of small and medium-sized enterprises (SMEs) in regional areas, and regional financial institutions are required to support them in cooperation with other various entities. Therefore, in this project, we will focus not only on the activities of the financial institutions alone, but also the efforts that regional financial institutions make to collaborate with various regional entities (local governments, commerce and industry bodies such as chambers of commerce and industry; expert groups such as tax accountants of SMEs). We position regional financial institutions as the core of cooperation between these entities and analyze the current state and issues of the cooperation. Specifically, we mainly analyze efforts to raise risk management capabilities of SMEs to prepare for natural disasters. which are of great interest from the perspective of the policy, and mergers of regional financial institutions.

< Major Research Results >

## Discussion Papers

- The Impact of Regional Bank Consolidation on Regional Economies: Evidence from Data on the Location of Bank Branches at the Municipal Level (HARIMAYA, Kozo; OZAKI, Yasufumi) DP 19-J-070
- Results and discussion of "Survey on SME preparations for natural disasters and support by regional financial institutions" (YAMORI, Nobuyoshi; OGAWA, Hikaru; YANAGIHARA, Mitsuyoshi; HARIMAYA, Kozo; TSUBUKU, Masafumi; OZAKI, Yasufumi; AIZAWA, Tomoko; UMINO, Shingo; ASAI, Yoshihiro; HASHIMOTO, Norihiro) DP 20-J-002

# Ш-6

# Dynamics of Inter-organizational Networks and Firm Lifecycle

Project Leader / SAITO Yukiko, SF

Project Period: June 11, 2018 - June 30, 2020

# < Overview >

In this project, we examine the dynamics of inter-organizational networks, focusing on the "power of networks" as a source of Japanese firms' competitiveness, driven by strong connections between organizations. There exist various costs including geographical friction in construction of inter-organizational networks, such as inter-firm transaction networks and networks related to knowledge spillover between organizations. By examining the effect of such costs, we will clarify the relationships between network dynamics and firm performance. In addition, while idiosyncratic firm shocks cause fluctuations in the macro economy and macro growth through inter-firm networks, changes in networks can function as absorption and amplification of propagation. By analyzing how the network responds to different shocks and how employment as another factor of production changes, we will clarify the mechanism of shock propagation. Furthermore, considering the structural change of firm dynamics, we analyze the role of firm networks in the firm lifecycle, the historical effect of firm growth, and determinants of the location pattern of economic activity.

### < Major Research Results >

## Discussion Papers

- Multinational Production and Labor Share (ADACHI, Daisuke; SAITO, Yukiko) DP 20-E-012
- Commuting Zones in Japan (ADACHI, Daisuke; FUKAI, Taiyo; KAWAGUCHI, Daiji; SAITO, Yukiko) DP 20-E-021

## Policy Discussion Papers

- Knowledge-creating Activity of Emerging Countries and Global Networks (IINO, Takashi; URABE, Sumiko; SAITO, Yukiko; YAMAUCHI, Isamu) PDP 19-P-009
- Adoption of Automation Technology and Labor Substitution (ADACHI, Daisuke; KAINUMA, Shuhei; KAWAGUCHI, Daiji; SAITO, Yukiko) PDP 19-P-010

# **III-7**

# Agglomeration-based Framework for Empirical and Policy Analyses of Regional Economies

Project Leader / MORI Tomoya, FF

Project Period: January 7, 2019 - December 31, 2020

## < Overview >

This project focuses on the economies in which urban agglomeration is a typical form of economic location, and develops both reduced-form regression and structural modelbased frameworks for studying population and industrial agglomerations as well as the associated interregional trade structure based on many-industry and many-region models of economic agglomeration. As for the reduced-form regression approach, we verify the usefulness of the framework by applying it primarily to the Japanese data with a focus on the impact of the development of the high-speed transportation network. For the analysis of interregional trade, besides the factors accruing from endogenous agglomeration force, our regression framework explicitly quantifies the taste heterogeneity across regions accruing from historical and cultural background using household expenditure and historical dialect data. For the structural-model based approach, we utilize the recent results from population game and operations research for equilibrium selection, and adopt Monte-Carlo simulations to characterize the qualitative properties of stable equilibria. In particular, we will qualitatively replicate the observed size and spatial distributions of urban and industrial agglomerations purely from the theoretical model.

# Ш-8

# Spatial Economic Analysis on Urban and Regional Economic Activities

Project Leader / TABUCHI Takatoshi, FF

Project Period: November 5, 2019 - October 31, 2021

# < Overview >

Urban and regional economies are closely related to international trade and labor markets. We analyze the factors of sustainable growth of cities and regions as globalization and the aging of society progress. We also investigate how different income classes and races with different historical backgrounds are spatially distributed based on the spatial economic approach and analyze the factors of intercity and intracity economic differentials. We aim to combine economic geography, trade theory, transport economics, labor economics, and development economics, and develop new research areas which will lead to useful economic policy implications from both welfare-economic and social perspectives.

# Other Research Results in Program III

# < Research results independent from any research project >

## Discussion Paper

• Estimating the property price indices in Tokyo using the repeat sales method, fixing sample selection bias and reflecting the structural changes of attributes (KUTSUZAWA, Ryuji) DP 19-J-027

# Policy Discussion Papers

- Monopolar Concentration in Tokyo and Promotion of Urban-to-Rural Migration (KONDO, Keisuke) PDP 19-P-006
- Prospects for the longevity of urban systems and regional economies under a shrinking population (HAMAGUCHI, Nobuaki) PDP 19-P-019

< Research results belonging to research projects prior to FY2019 >

# Dynamics of Inter-organizational Network and Geography

Project Leader / SAITO Yukiko, SF

Project Period: May 31, 2016 - April 30, 2018

# Discussion Paper

• Firm Performance and Asymmetry of Supplier and Customer Relationships (FUJII, Daisuke; SAITO, Yukiko) DP 19-E-032

# ▶ Policy Discussion Paper

 Structural Change in Firm Dynamics: From Inter-Firm Network and Geospatial Perspectives (HONG, Gee Hee; OGURA, Yoshiaki; SAITO, Yukiko)
 PDP 19-P-031

# Program

# IV

# Innovation

Program Director



# NAGAOKA Sadao

The creation of new knowledge and its exploitation to resolve problems which we face is the main source of innovation. This program will develop original data to understand the innovation processes and will conduct research from an international perspective to contribute to evidence-based policy formation. Specifically, the program will analyze the innovation capabilities of industries, the economic impact of Artificial Intelligence, intellectual property systems, open innovation, knowledge transfer and the mobility of human resources across organizations, university-industry cooperation, technical standards, and business and industrial organizations that promote innovation.

# Introduction of Research Projects

# **IV-1**

# Frontiers of Innovation Policy: Evidence from micro data

Project Leader / NAGAOKA Sadao, FF

Project Period: October 10, 2017 - September 30, 2019

## < Overview >

The creation of new scientific and technological knowledge and exploiting such knowledge for solving social and economic problems is the cornerstone of innovation. Strengthening the capability to realize such innovation continuously is a necessary condition for enhancing economic growth. Exploiting new and expanding technological opportunities brought about by artificial intelligence (AI), the Internet of Things (IoT), and Big Data, the absorption of scientific progress as well as exploitation of global knowledge for original discoveries and innovations have become very important in this regard. It also will be important to assess innovation policy from this perspective. This research will assess the innovation capability of Japanese industry from this perspective based on original micro data and deepen the analysis hitherto made by the research members in order to examine the frontier issues and agenda for innovation policy.

### < Major Research Results >

### Discussion Papers

 Effects of Offshore Production and R&D on Domestic Innovation Activities (YAMASHITA, Nobuaki; YAMAUCHI, Isamu) DP 19-E-068

- Determinants and Impacts of Incorporation of Local Public Technology Transfer Organizations: Evidence from Japan's *Kohsetsushi* (FUKUGAWA, Nobuya) DP 19-E-095
- The Role of Subsidies in the Innovation Policy Mix—The Case of the Supporting Industry Program in Japan (SUZUKI, Jun) DP 19-J-059
- Contributions of Corporate Basic Research and Research Collaboration with Academia to Innovation and Spillover Performance in Japan (NAGAOKA, Sadao; EDAMURA, Kazuma; ONISHI, Koichiro; TSUKADA, Naotoshi; NAITO, Yusuke; KADOWAKI, Ryo) DP 20-J-001

## RIETI-NISTEP Joint Workshop

"Rebuilding the Innovative Capability of Japanese Industry" (September 17, 2019) See P.79



# **IV-2**

# Creation and Development of High-tech Startups

Project Leader / HONJO Yuji, FF

Project Period: October 10, 2017 - September 30, 2019

### < Overview >

A startup ecosystem that incorporates linkages with external organizations is important to foster new technology-based firms as business uncertainty increases over time. In this research project, we survey high-tech startups and venture capital firms, and address issues for the startup ecosystem in Japan. In particular, we focus on high-tech startups' linkages with external organizations and examine the performance of spinoffs and corporate venture capital, while taking into account the role of existing organizations in industries. This study provides a better understanding of the startup ecosystem in the Japanese economy and elucidates how effectively high-tech startups conduct innovation through linkages and networking with external organizations.

### < Major Research Results >

### Discussion Papers

- Do Entrepreneurs Have High Life Satisfaction? Evidence from Japan (HONJO, Yuji; IKEUCHI, Kenta; NAKAMURA, Hiroki) DP 19-E-083
- Potentiality and Actuality: Characteristics and Linkage of Entrepreneurs and Angel Investors in Japan (NAKAMURA, Hiroki; HONJO, Yuji; IKEUCHI, Kenta) DP 19-E-089
- Communities of Investors and Start-up Companies: An Analysis Using Bipartite Stochastic Block Model (KOJAKU, Sadamori; MIYAKAWA, Daisuke) DP 19-E-101
- The Role of Business Groups in Creating New, Innovative Firms: Evidence from Partially Owned Firms in Japan (KIM, Young Gak; NAGAOKA, Sadao) DP 20-J-010

### RIETI Policy Seminar

"Entrepreneurship, Innovation, and Finance: New growth avenues in developed economies" (September 26, 2019) See P.70



## RIETI International Workshop

"Entrepreneurship, Innovation, and Finance: New growth avenues in developed economies (Day 2) Professional Development Workshop" (September 27, 2019) See P.80



# **IV-3**

# Study on System and Management of Global Data & Al Utilization—Toward the establishment of a global data supply chain

Project Leader / WATANABE Toshiya, FF

Project Period: March 18, 2019 - February 28, 2021

# < Overview >

In this project, we will study the following three issues related to data utilization both domestically and across national borders in terms of decision-making by data providers and from the perspective of existing data users.

The first issue is data transfer restrictions across national borders. Regarding data utilization contracts governing overseas cooperation and how they will affect data utilization, there is concern that data localization and regulation will hinder global data utilization. Based on this point, in order to obtain basic knowledge for establishing an international (cross-border) "data supply chain," a questionnaire will be conducted to determine the following:

1. What is the actual situation of cross-border data utilization within overseas organizations?

The protected data system that will be protected by the revised Unfair Competition Prevention Law is also expected to be used for data utilization in the near future. We will attempt to understand the actual situation of utilization on this point.

- 2. What is the influence of amendments to the Unfair Competition Prevention Law on the decision-making of data providers? Furthermore, with regard to the AI data contract guidance organized by METI, we will investigate whether enterprises and other entities are able to use it and how the guidance affects contracts.
- We will investigate the main issues of the AI data contract guidance in terms of the actual situation and the effects of the guidelines.

We will conduct a questionnaire survey and an interview survey to examine these objectives and international data contract guidelines will be developed in this project.

# **IV-4**

# Digitalization and Innovation Ecosystem: A holistic approach

Project Leader / MOTOHASHI Kazuyuki, FF

Project Period: June 3, 2019 - March 31, 2021

## < Overview >

The digital transformation of industry through Big Data/Al/loT is causing significant changes in how innovation is organized. Specifically regarding the framework known as open innovation, the innovation ecosystem, involving multiple and diverse players, such as venture firms and universities, is becoming more and more important, in addition to traditional one-to-one bilateral collaboration frameworks. In this study, a holistic analysis of innovation ecosystem dynamics, i.e., its formation, growth and decline, is conducted using an empirical approach. Furthermore, the policy implications of various measures specifically targeted to individual components of the ecosystem, such as industryacademia collaboration, startup promotion and regional cluster policies are evaluated from the viewpoint of their consistency, given the characteristics of Japan's national innovation system.

### < Major Research Results >

### Discussion Paper

- Science and Technology Co-evolution in Al: Empirical Understanding through a Linked Dataset of Scientific Articles and Patents (MOTOHASHI, Kazuyuki) DP 20-E-010
- Policy Discussion Paper
- Digitalization and New Product Development in Manufacturing SMEs: A Comparative Study of Germany and Japan (MOTOHASHI, Kazuyuki; RAMMER, Christian) PDP 20-P-007

# Other Research Results in Program IV

## < Research results independent from any research project >

### Policy Discussion Paper

 The Fourth Industrial Revolution and Japan's industrial innovative capability (NAGAOKA, Sadao) PDP 19-P-020

< Research results belonging to research projects prior to FY2019 >

# Mobility of Knowledge and Innovation Performance

# Project Leader / YAMAUCHI Isamu, RAs

Project Period: July 27, 2015 - May 31, 2017

### Discussion Paper

• The Impact of Spillover Pools on Firm Patent Applications in Japan (EDAMURA, Kazuma) DP 19-J-023

# Empirical Analysis of Innovation Ecosystems in Advancement of the Internet of Things (IoT)

Project Leader / MOTOHASHI Kazuyuki, FF Project Period: May 1, 2017 - March 31, 2019

# Discussion Paper

 Linkage of Patent and Design Right Data: Analysis of Industrial Design Activities in Companies at the Creator Level (IKEUCHI, Kenta; MOTOHASHI, Kazuyuki) DP 20-E-005

### Program



# **Industry Frontiers**



Program Director

# **OHASHI** Hiroshi

Through innovation in the key technological areas of sophistication of data processing and evolution of telecommunication networks, signs of changes in the industrial structure have begun to be seen in Japan as well as in other leading nations. Via the Internet of Things (IoT) using sensor technology, large quantities of unstructured data have now become accessible, and artificial intelligence (AI) technology is being gradually put into practical use. In Japan, new industrial frontiers are opening. As such, this program will undertake research as to how policies should be instituted to overcome the challenges facing the Japanese economy, taking cross-industry policies into perspective, in addition to conventional policies intended for individual industries.

# Introduction of Research Projects

# V-1

# **Policy Analyses on Industrial Organization**

Project Leader / OHASHI Hiroshi, FF

Project Period: January 15, 2018 - December 31, 2019

## < Overview >

Abenomics has been successful in the past years as evidenced by nominal gross domestic product (GDP) and corporate revenues reaching record high levels, and the unemployment rate also hitting its lowest level. In the meantime, capital investment of firms and consumption are stagnant. The purpose of this study is to examine the extent to which market structure matters in the weak corporate activities, and to analyze the extent to which policy measures play roles in stimulating corporate activities.

# < Major Research Results >

### Discussion Papers

- Linkage of Markups through Transaction (NAKAMURA, Tsuyoshi; OHASHI, Hiroshi) DP 19-E-107
- Imports, Exports, and the Impact of Mergers on Domestic Markets: A Case Study from Japan's Copper Tube Industry (NAKAMURA, Tsuyoshi; OHASHI, Hiroshi) DP 20-E-013
- Economic Analysis of Market Expansion Re-pricing: Impact on Government Price Control of Antihypertensive Pharmaceuticals (NISHIKAWA, Kohei; OHASHI, Hiroshi) DP 20-J-005

# V-2

# Study Group on Corporate Finance and Firm Dynamics (FY2017)

Project Leader / UESUGI lichiro, FF

Project Period: July 14, 2017 - June 30, 2019

## < Overview >

This project aims to set a policy-oriented research agenda focusing on corporate finance, banking, and firm dynamics and implement empirical studies on them. The policy-oriented research topics include (1) the role of the public sector in the loan market, (2) startups and exits of firms, (3) measurement of the cost and benefit of financial intermediaries in Japan, (4) the role of real estate in the financial market, and (5) the role of interfirm networks and the propagation of financial shocks.

# < Major Research Results >

## Discussion Papers

- Damage to the Transportation Infrastructure and Disruption of Inter-firm Transactional Relationships (HOSONO, Kaoru; MIYAKAWA, Daisuke; ONO, Arito; UCHIDA, Hirofumi; UESUGI, lichiro) DP 19-E-043
- Lack of Successors, Firm Default, and the Performance of Small Businesses (TSURUTA, Daisuke) DP 19-E-047
- Exit of Small Businesses: Differentiating between Insolvency, Voluntary Closures and M&A (XU, Peng) DP 19-E-051
- The Effect of Physical Collateral and Personal Guarantees on Business Start-ups (HONJO, Yuji; ONO, Arito; TSURUTA, Daisuke) DP 19-E-087

- Using Machine Learning to Detect and Forecast Accounting Fraud (KONDO, Satoshi; MIYAKAWA, Daisuke; SHIRAKI, Kengo; SUGA, Miki; USUKI, Teppei) DP 19-E-103
- Speedy Bankruptcy Procedures and Bank Bailouts (UEDA, Kenichi) DP 19-E-108
- Using Machine Learning to Detect and Predict Corporate Accounting Fraud (USUKI, Teppei; KONDO, Satoshi; SHIRAKI, Kengo; SUGA, Miki; MIYAKAWA, Daisuke) DP 19-J-039

# **V-3**

# Study Group on Corporate Finance and Firm Dynamics (FY2019)

# Project Leader / UESUGI lichiro, FF

Project Period: November 11, 2019 - October 31, 2021

# < Overview >

This project aims to set a policy-oriented research agenda focusing on corporate finance, banking, and firm dynamics and to implement empirical studies on them. The research issues include (1) the role of commitment by the public sector in the loan market, (2) the role of the financial sector in firms' entry and exit, (3) functions of financial intermediation and inter-firm transaction relationships, and (4) the impact of economic policy uncertainty on the behavior of firms and banks.

# **V-4**

# Development of New Indicators for Service Sector Analysis and EBPM

Project Leader / KONISHI Yoko, SF

Project Period: December 19, 2017 - November 30, 2019

## < Overview >

Through the spread of utilization of big data, artificial intelligence (AI), and Internet of Things (IoT) technology in recent years, due to the provision of data and technology, it is becoming possible to analyze industries and conduct evidence-based policy making (EBPM), which was previously difficult. The purpose of this project is to develop new economic indicators that complement government statistics for the service industry where the proportion of the gross domestic product (GDP) and labor market has increased and statistical data is strongly required in order to grasp the actual state of the economy. Specifically, we aim to propose highly useful data points such as sales trends, competitiveness, business confidence, and productivity, and implement empirical analysis using them. Among the service industries, we attempt policy evaluation and proposals using EBPM methods with big data on infrastructure closely related to daily life such as logistics, communication, and finance.

### < Major Research Results >

## Discussion Papers

- Who is Free from Hypertension, Diabetes and Dyslipidemia in the Middle-aged and Elderly Population of Japan? : Verification through a Longitudinal Survey of Middleaged and Elderly People (SEKIZAWA, Yoichi; KONISHI, Yoko; IKARI, Hiroshi) DP 20-J-006
- What Japanese Tourism Amenities are Most Influential in Terms of Demand from Inbound Tourists? (KONISHI, Yoko; SAITO, Takashi) DP 20-J-014
- Energy Saving and Price Fluctuation of Home Appliances: Hedonic Regression by Panel Data (1996-2019) (KONISHI, Yoko; SAITO, Takashi; ISHIKAWA, Toshiki) DP 20-J-018

# V-5

# Globalization, Innovation, and Competition Policy

Project Leader / KAWAHAMA Noboru, FF

Project Period: January 15, 2018 - December 31, 2019

## < Overview >

The globalization of the economy has entered a new phase and the importance of innovation and competition policies as drivers of economic growth has been increasingly recognized on an international level. Against this background, today, competition laws are actively enforced not only in the United States and the European Union but also in other jurisdictions all over the world. In Japan, too, pursuing an active competition policy and promoting the innovation thereof are vital to the economy. Therefore, it is important to ask what policy issues might arise in this process and what solutions are available. These questions should be resolved by taking into account the real state of the Japanese economy and the necessity of an internationally harmonized approach to competition policy. The goal of the research project is to present the direction that competition policy should take when globalization and innovation are unprecedentedly emphasized. This interdisciplinary project employs insights from economics and legal studies, as well as lessons obtained through practicing law and policy.

### < Major Research Results >

## Discussion Paper

 Analyzing the Online Advertising Market from the Perspective of Competition Policy (KAWAHAMA, Noboru; TAKEDA, Kuninobu) DP 20-J-013

# Productivity Gaps and Industrial Competitiveness

Project Leader / NOMURA Koji, FF

Project Period: January 15, 2018 - December 31, 2019

# < Overview >

Policies to enhance productivity in the Japanese economy, where expansion of the productivity gap is noted, are required in the second stage of Abenomics. This project analyzes the industrial origins and the structural factors in Japan's productivity gap. In particular, the project focuses mainly on the source of inferiority in the wholesale and retail industry, the role of labor quality and industry allocation for reducing the labor productivity gap in the service industry, and the relationship between energy productivity and overall efficiency.

# < Major Research Results >

# Discussion Papers

- Wholesale and Retail Service Price Indices in Japan: Retrospective Measurement from 1955 (NOMURA, Koji) DP 20-J-007
- How Can Measurement of Benchmark Production Systems be Improved?— The Structure of Secondary Products by Main Activity based on the Survey on Diversification of Sales in Japan (NOMURA, Koji) DP 20-J-008

# V-7

# Japan's History of Thought on Agricultural Policy and Structural Reform of Agriculture

Project Leader / YAMASHITA Kazuhito, SF

Project Period: February 13, 2018 - January 31, 2020

# < Overview >

For Japanese agriculture to survive, we must explore foreign markets by enhancing its price competitiveness as the domestic market shrinks due to an aging and decreasing population. In terms of policies, we have to take measures to achieve a structural reform of agriculture in order to increase its productivity and shift from pricing support to direct payments which have been introduced in the United States and the European Union. From the Meiji era on, the majority of the agricultural community has strongly supported the idea of protecting small-scale farmers with pricing support. Kunio Yanagida, Tanzan Ishibashi, and others, however, actively and positively advocated the necessity of a structural reform of agriculture. I introduce their forgotten ideas in order to contribute to the formation of a structural reform policy of agriculture.

# Discussion Paper

• The Promotion of Cooperatives by Kunio Yanagida (YAMASHITA, Kazuhito) DP 19-J-034

# **V-8**

# Macro & Micro Economics of Artificial Intelligence

Project Leader / MANAGI Shunsuke, FF

Project Period: March 1, 2018 - February 29, 2020

# < Overview >

The race in the development of artificial intelligence (AI) has become increasingly competitive all around the world. AI has already started being implemented in real economic activity. Diffusion of AI has the potential to overcome several problems in our society. On the other hand, it will also cause several new problems. When we consider the change expected in our society caused by AI diffusion, there is a need to identify the relationships between AI and many factors related to the current policy, law, and economic activity of each entity. The purpose of our research project proposes labor and other policies in considering the impact of AI in the medium and long run.

# < Major Research Results >

# Policy Discussion Paper

• Future Forecasts of the Impact of AI on Employment in Japan and Policy Proposals (IWAMOTO, Koichi) PDP 20-P-009

# **V-9**

# Dynamics of Economy and Finance from the Economic Network Point of View

Project Leader / AOYAMA Hideaki, FF

Project Period: July 2, 2018 - June 30, 2020

## < Overview >

This project aims to use economic and financial network data, including trade network data original to Japan, to obtain new insights into the macroeconomy. Business cycles, various types of economic crises due to natural disasters and foreign influence, etc. occur as a result of interactions between economic agents such as firms, financial institutions, and governments. Such interactions form networks between them. Furthermore, time series such as financial items, macroeconomic indices, and price data have correlations which form ties between them as well. Using much of these real big data to construct a multitude of networks and simulation models, we shall reveal the true nature of macroeconomic network dynamics.

< Major Research Results >

# RIETI Workshop

"Dynamics in Finance and Economy on Economic Networks" (October 8-9, 2019) See P.81

# **V-10**

# Policy Issues on the Electricity Market Reform after 2020

Project Leader / HATTA Tatsuo, FF

Project Period: October 15, 2018 - September 30, 2020

## < Overview >

The reform process of the electric power system has been taking place in Japan in preparation for the unbundling of the transmission sector in 2020. This process has revealed the issues to be studied for the remaining reforms after the unbundling. This project aims at providing policy proposals for the postunbundling reforms through an investigation of European experiences as well as theoretical and empirical analysis. This project is jointly conducted by economists and engineers.

# V-11

# Economic Growth and Fluctuations Under Population Decline

Project Leader / YOSHIKAWA Hiroshi, FF

Project Period: August 5, 2019 - July 31, 2021

## < Overview >

We investigate the impact of the current serious population decline on the Japanese economy. Since population decline is accompanied with aging, the effects on economic growth and economic fluctuations will be complicated. Our analysis includes both theoretical and empirical aspects, both from macro and micro perspectives. The theoretical framework is based on the literature of economic growth theory, network theory and microeconomics of household and firm behavior, which we employ as background for our focus on supply and demand in the labor market, dynamics of asset prices in the financial markets, changes in the housing market and household consumption behavior, etc. Through such multifaceted analysis, we will evaluate the impacts of the current population decline comprehensively.

### < Major Research Results >

### Discussion Paper

 The Role of Granularity in the Variance and Tail Probability of Aggregate Output (Yoshiyuki ARATA) DP 20-E-027

# Other Research Results in Program V

< Research results independent from any research project >

### Policy Discussion Paper

• The Roles of Society 5.0 in Industrial Frontiers (OHASHI, Hiroshi) PDP 19-P-021

< Research results belonging to research projects prior to FY2019 >

# Large-scale Simulation and Analysis of Economic Network for Macro Prudential Policy

Project Leader / AOYAMA Hideaki, FF

Project Period: June 30, 2016 - May 31, 2018

### Discussion Papers

- Topology and Formation of Production Input Interlinkages: Evidence from Japanese microdata (Yoshiyuki ARATA; MUNDT, Philipp) DP 19-E-027
- Hierarchical and Circular Flow Structure of the Interfirm Transaction Network in Japan (KICHIKAWA, Yuichi; IINO, Takashi; IYETOMI, Hiroshi; INOUE, Hiroyasu) DP 19-E-063

# Heterogeneity across Agents and Economic Growth

Project Leader / YOSHIKAWA Hiroshi, FF

Project Period: July 3, 2017 - March 31, 2019

### Discussion Papers

- The Art of Central Bank Communication: A Topic Analysis on Words used by the Bank of Japan's Governors (KEIDA, Masayuki; TAKEDA, Yosuke) DP 19-E-038
- Demand System and Liquidity Constraints: Simple Methodology for Measuring Liquidity Constraint (INOSE, Junya) DP 19-E-044
- Population decline, structural change and economic growth (YOSHIKAWA, Hiroshi; ANDO, Koichi) DP 19-J-033

# Program



# Raising Industrial and Firm Productivity



Program Director

FUKAO Kyoji

The aim of this program is to measure industry and firm-level productivity and its determinants for Japan and other East Asian countries and to conduct research on policies aimed at raising productivity. At the industry level, in addition to updating and expanding the Japan Industrial Productivity (JIP) and China Industrial Productivity (CIP) databases in collaboration with Hitotsubashi University, we will construct an industrial productivity database by prefecture for Japan and examine the total factor productivity (TFP) disparity between regions and the factors behind it, etc. At the firm or establishment level, employing micro-data from government statistics and corporate financial data in Japan and abroad, we will research the following: determinants of productivity gaps among firms; how the impact of globalization and changes in demand affect corporate performance; policies for raising productivity dynamics. We will also measure investment in intangible assets such as research and development, software, in-house training, and organizational structure, all of which are important sources of innovation and productivity growth at both industry and firm levels, and examine the economic effects of such investments.

# Introduction of Research Projects

# **VI-1**

# **East Asian Industrial Productivity**

# Project Leader / FUKAO Kyoji, FF

Project Period: April 1, 2019 - March 31, 2021

# < Overview >

Japan's economy these days is sometimes called a "hypothermia economy," in which sluggish growth in aggregate demand and supply due to the aging and shrinking of the population and declining capital formation has become the norm. However, taking a more careful look at data on Japan's industrial structure as well as labor and capital input, one finds that, hidden underneath this low growth, Japan's economy is undergoing rapid structural change. Examples include demand shifts across industries such as expanding demand for nursing care on the one hand and sluggish export demand due to the deceleration of China's economy on the other; substantial improvement in manufacturing markup ratios under the depreciation of the yen brought about by Abenomics (in terms of the real effective exchange rate, the yen is the weakest it has been since the early 1970s); an increase in hours worked and a decline in labor quality due to the increased (primarily non-regular) employment of women and the elderly; the spread of new information and communication technology driving the so-called Fourth Industrial Revolution; and the growing dependence of prefectural economies on income transfers and net imports. In order to design appropriate growth strategies and to prepare for "black swan" events like economic crises, it is necessary to accurately comprehend such structural changes.

This project aims to carefully examine structural changes in the Japanese and East Asian economies and contribute to the design of growth strategies based on evidence through the following:

- (1) Analyses of changes in labor and capital input (including intangible assets) and total factor productivity growth at the detailed industry level, using the JIP 2018 Database, which has been fully revised to correspond to the new SNA.
- (2) Analyses of China's economic slowdown, using the new China Industrial Productivity (CIP) Database.
- (3) International productivity comparisons and analyses in collaboration with the World KLEMS, EU KLEMS, and Asia KLEMS projects and the OECD.
- (4) Analyses of productivity, the Fourth Industrial Revolution, international competitiveness, dual structures, etc., using official firm and establishment data as well as data from the East Asian Listed Companies (EALC) database.

(5) Analyses of regional productivity differences in Japan through collaboration with the Regional-level Japan Industrial Productivity (R-JIP) project.

# **VI-2**

# Microeconometric Analysis of Firm and Industry Growth

Project Leader / HOSONO Kaoru, FF

Project Period: May 22, 2017 - April 30, 2019

## < Overview >

The aim of this project is to pin down key factors for firm growth from various firm activities. Specifically, using firm-, establishment-, or item-level micro data, this project conducts empirical analyses on the relationship between firm growth and (1) research and development (R&D) and innovation and (2) overseas activities. This project further analyzes the relationship between firm productivity and industrial development with special attention given to resource misallocation among firms and industries.

# < Major Research Results >

### Discussion Papers

- Size-dependent VAT, Compliance Costs, and Firm Growth (HOSONO, Kaoru; HOTEI, Masaki; MIYAKAWA, Daisuke) DP 19-E-041
- Dynamic Productivity Decomposition with Allocative Efficiency (HOSONO, Kaoru; TAKIZAWA, Miho) DP 19-E-069
- Determinants of Staged Project Management and Success in Innovation: Empirical Analysis based on the Japanese National Innovation Survey (HANEDA, Shoko; IKEDA, Yuya) DP 19-E-094
- Shocks to Supply Chain Networks and Firm Dynamics: An Application of Double Machine Learning (MIYAKAWA, Daisuke) DP 19-E-100
- Firm Age, Productivity, and Intangible Capital (HOSONO, Kaoru; TAKIZAWA, Miho; YAMANOUCHI, Kenta) DP 20-E-001
- Impact of R&D Activities on Pricing Behaviors with Product Turnover (HARA, Yasushi; TONOGI, Akiyuki; TONOGI, Konomi) DP 20-E-006
- Local Labor Market Effects of Foreign Direct Investment (KIYOTA, Kozo; TAKIZAWA, Miho; NAKAJIMA, Kentaro) DP 19-J-038
- Non-tariff Measures and Margins of Trade: Evidence from Japanese Manufacturing Firms (OBASHI, Ayako) DP 19-J-044

# **VI-3**

# Research on Productivity-improving Capital Investment

Project Leader / MIYAGAWA Tsutomu, FF

Project Period: July 3, 2017 - June 30, 2019

## < Overview >

This project has two aims. One is to support the construction

of an extended version of the Japan Industrial Productivity (JIP) database, estimating comprehensive capital accounts by industry. In December 2016, the Cabinet Office published a new version of the National Accounts of Japan (SNA), following the 2008SNA standard which recommended including several types of intangibles into the capital account. We will construct a new revised capital account which integrates the tangible capital account with the intangible capital account.

The other aim is to study the effects of several types of capital assets on economic performance. The project's focus is not only on the complementarity between the usual tangibles and intangibles, but also on the intangibles such as management resources, human resources, and customer satisfaction which are crucial factors for performance in service sector firms and non-profit organizations.

### < Major Research Results >

### Discussion Papers

- On the Decline of R&D Efficiency (MIYAGAWA, Tsutomu; ISHIKAWA, Takayuki) DP 19-E-052
- The Consequences of Short-Time Compensation: Evidence from Japan (KATO, Takao; KODAMA, Naomi) DP 19-E-056
- The Decline of Investment-Adjustment Costs in Japan: Empirical Evidence Using Multiple q Investment Equations (TONOGI, Konomi; MIYAGAWA, Tsutomu) DP 19-J-041
- Management Practices and Labor Productivity in Intensive Care Homes for the Elderly (INUI, Tomohiko; KAWASAKI, Kazuyasu; ITO, Yukiko; MIYAGAWA, Tsutomu; MANO, Toshiki) DP 19-J-049
- The effect of management practices on the performance of bus companies (KAWASAKI, Kazuyasu; INUI, Tomohiko; MIYAGAWA, Tsutomu) DP 19-J-051
- Corporate Headquarters as a Resource for Diversification (KAWAKAMI, Atsushi) DP 19-J-061
- How Does ICT Investment Affect Employment and Productivity? Evidence from a Japanese Tax Incentive (TAKIZAWA, Miho; MIYAKAWA, Daisuke) DP 19-J-068

# **VI-4**

# Analysis of the Regional-Level Industrial Productivity and Regional Production Networks

Project Leader / TOKUI Joji, FF

Project Period: July 3, 2017 - June 30, 2019

### < Overview >

This project aims to update and refine our Regional-Level Japan Industrial Productivity Database (R-JIP) and conduct related analyses using the database. Since many regions are predicted to face severe declines in their population and rapid aging, it is vital that they conduct a thorough examination of their position within national production networks and design coherent policies to remedy the situation. We plan to upload the newly-updated R-JIP 2017 database, in which data are extended to 2012. In providing R-JIP 2017, we added some major refinement to our estimation methods, which will be explained. We also provide a regional input-output (IO) table categorized by prefectures. Using this original regional IO table, we undertake value chain analysis to give a more accurate picture of vertical specialization of each region, and conduct more sophisticated analysis of regional price level differences, taking into account the input structure and input prices of each service industry. In performing these analyses, we can cast a new light on the background of regional productivity differences.

## < Major Research Results >

### Discussion Papers

- Measuring Prefectural Price Differences of Agricultural Products—Location and Product Quality (TOKUI, Joji; MIZUTA, Takeshi) DP 19-J-048
- Why Do We Observe a Regional Balassa-Samuelson Effect? (TOKUI, Joji) DP 19-J-054
- Japanese Inter-prefectural Input-Output Table: Construction Method and Main Results for 2005 (ARAI, Sonoe) DP 20-J-009

# **VI-5**

# Research on the Improvement in Resource Allocation and Productivity among the Healthcare and Education Service Industries

Project Leader / INUI Tomohiko, FF

Project Period: July 3, 2017 - June 30, 2019

### < Overview >

The primary objective of this project is to focus on the healthcare and education sectors, wherein measuring the quality of service and productivity still are academically and practically unclear. The project will aim to use the various sets of micro level data and empirically analyze the determinants of the quality of services and productivities. The key may be the establishment of causality. While rigorously addressing endogeneity, we seek an optimal resource allocation and propose more cost-effective policies to improve the services in both sectors.

### < Major Research Results >

### Discussion Papers

- Effects of Class-Size Reduction on Cognitive and Non-Cognitive Skills (ITO, Hirotake; NAKAMURO, Makiko; YAMAGUCHI, Shintaro) DP 19-E-036
- Does Computer-aided Instruction Improve Children's Cognitive and Non-cognitive Skills?: Evidence from Cambodia (ITO, Hirotake; KASAI, Keiko; NAKAMURO, Makiko) DP 19-E-040
- Does Mental Health Affect Labor Market Outcomes? Evidence from a National Representative Survey in Japan (INUI, Tomohiko; KAWAKAMI, Atsushi; MA, Xin Xin; ZHAO, Meng (KONISHI)) DP 19-E-061
- Relationship between Competition and Outcomes in the Hospital Market (SHOJI, Keishi; IBUKA, Yoko) DP 19-J-047

# **VI-6**

# Refinement and Analysis of the Regional-Level Japan Industrial Productivity Database: Analysis of regional industrial linkages and productivity

Project Leader / TOKUI Joji, FF

Project Period: November 11, 2019 - October 31, 2021

### < Overview >

The purpose of this project is to update and refine our Regional-Level Japan Industrial Productivity Database (R-JIP) and to carry out some related analyses using the database. Since many Japanese rural regions are predicted to face severe declines in population and rapid aging, it is vital that they objectively examine their position within national production networks and design coherent policy to remedy the situation. To extend the database beyond 2012, construction of the database must be updated in adherence to 2008SNA and new industrial classifications. In this project we examine the estimation method to adapt to new criteria and new data series from 2006 to 2015. We also provide inter-regional IO tables divided by prefectures. Since the 2005 inter-prefectural IO table is nearly complete, we conduct analysis of industrial linkages among prefectures. We carry out analysis of regional productivity differences taking into account land input as well as other factors that may influence them. In performing these analyses, we can shed new light on regional productivity differences.

# Other Research Results in Program VI

< Research results independent from any research project >

### Policy Discussion Paper

- The origins of Japan's economic stagnation and necessary policies: An analysis based on the JIP 2018 (KIM, Young Gak; KWON, Hyeog Ug; FUKAO, Kyoji) PDP 19-P-022
- < Research results belonging to research projects prior to FY2019 >

# East Asian Industrial Productivity

Project Leader / FUKAO Kyoji, FF

Project Period: April 24, 2017 - March 31, 2019

### Discussion Papers

- Missing Growth in the Lost Decade (KODAMA, Naomi; LI, Huiyu) DP 19-E-026
- Global Value Chains and Domestic Innovation (ITO, Keiko; IKEUCHI, Kenta; CRISCUOLO, Chiara; TIMMIS, Jonathan; BERGEAUD, Antonin) DP 19-E-028
- Determinants of Structural Adjustment and Employment Use in Japan: Firm Characteristics, Offshoring and Industrial Robotics (DESTEFANO, Timothy; HANEDA, Sho; KWON, Hyeog Ug) DP 19-E-067
- Effects of Buyer and Supplier Relationships and Capital Relationships on R&D Activities (YAMAGUCHI, Akira; IKEUCHI, Kenta; FUKAO, Kyoji; KWON, Hyeog Ug; KIM, Young Gak) DP 19-J-032
- Industry Dynamics from Resource Redistribution in the Japanese Economy— Empirical research using Economic, Establishment and Enterprise Censuses of Japan (FUKAO, Kyoji; KWON, Hyeog Ug; KIM, Young Gak; IKEUCHI, Kenta) DP 19-J-040
- An Empirical Analysis of Sources and Uses of Corporate Saving (FUKAO, Kyoji; IKEUCHI, Kenta; KIM, Young Gak; KWON, Hyeog Ug) DP 19-J-064
- Employment and Productivity Dynamics in Japan: Contribution to the OECD DynEmp/MultiProd Project and International Comparisons (IKEUCHI, Kenta; ITO, Keiko; FUKAO, Kyoji; KWON, Hyeog Ug; KIM, Young Gak) DP 19-J-066

### Program



## Human Capital

Program Director



### **TSURU** Kotaro

For Japan, a nation with scarce resources, to maintain and strengthen economic vitality and innovation and increase its growth potential by using its advantages despite a declining population resulting from a rapidly aging society and intensifying global competition among other factors, a significant key is how to utilize its human resources. We will conduct multifaceted, comprehensive research on ideal labor market systems for increasing worker incentives and capabilities; reconstruction of employment institutions and systems from a full life-cycle perspective from early childhood education through higher education; human resources development in employment years; and utilization of the elderly as human resources as well as from the perspective of promoting diversity including increased women's participation.

### Introduction of Research Projects

### VII-1

### **Reform of Labor Market Institutions**

Project Leader / TSURU Kotaro, FF

Project Period: April 2, 2018 - March 31, 2020

### < Overview >

In order to study a new "form" for Japan's labor market institutions and types of reform, a study group will be organized to conduct theoretical and empirical research from various perspectives such as law, economics and management. While looking broadly at labor market institutions as a whole, we will also look into the interrelationships of each constituent part, and in particular will make suggestions regarding a comprehensive system of labor laws and policies from a standpoint that transcends vertical segmentation and boundaries. Analysis will be conducted by fully embracing international viewpoints and methods of analysis, including experiences from Europe and elsewhere, and will attempt to elucidate the relationships between labor laws and institutions and the labor market and employment systems, and in turn the relationship with economic performance.

< Major Research Results >

### Discussion Papers

- Diversity Management and Human Resource Management: Personnel System Reform and Working Practice Flexibility (SATO, Hiroki) DP 19-J-024
- Causal Mechanisms of the Decline in Long-term Employment in Japan: Evidence

from Long-run Panel Data (MURATA, Keiko; HORI, Masahiro) DP 19-J-028

 Japan's Employment System from a Historical Perspective: Formation, Expansion, and Contraction of Internal Labor Markets (NAKABAYASHI, Masaki; MORIMOTO, Mayo) DP 19-J-036

### Policy Discussion Papers

- Restructuring Japan's Employment System: Overview (TSURU, Kotaro) PDP 19-P-008
- Study on the actual status of education, training and skills in schools and workplaces in Japan—evidence from a comprehensive survey by RIETI, "Internet Survey on Intergenerational Education and Training, and Cognitive and Non-cognitive Abilities" (TSURU, Kotaro; KUME, Koichi; SANO, Shinpei; YASUI, Kengo) PDP 19-P-035

### Publication

TSURU Kotaro, *Toward Restructuring the Employment System: How Can We Change Japan's Work Style?* Nippon Hyoronsha Co., Ltd., September 2019



### VII-2

### Employment System Reform to Use Human Resources More Efficiently

Project Leader / OWAN Hideo, FF

Project Period: May 29, 2017 - April 30, 2019

### < Overview >

Decision-making and employment practices of Japanese companies have been incompatible with those from overseas, which became a major hurdle in the globalization process for Japanese companies. With economic globalization further developing, integration through standardization of systems and establishment of knowledge networks has been increasingly important, while correcting human resource management divided between domestic and overseas. Meanwhile, partially due to requests from governments and societies seeking working style reforms and difficulties in recruitment, workforces have been diversifying in terms of attributes, needs, and careers. The range of responsibilites for front-line managers in terms of recruitment, training, placement, and evaluation has been expanding. This is referred to as decentralization of personnel functions. While the Human Resources department delegates authority to frontline managers, it is expected that it will further strengthen the collection of information to support front-line managers' decisionmaking and monitor the health of the organization.

In recent years, due to increasing use of enterprise resource planning (ERP) software packages and groupware, various types of human resources data have become increasingly available including: (1) information on goals and task assignment under the management by objectives (MBO), (2) evaluation of bosses by subordinates and colleagues under a 360-degree evaluation system, (3) work environment information obtained through employee satisfaction surveys, and (4) non-cognitive ability information collected by aptitude tests and human assessments. The development of artificial intelligence (AI) technology will further accelerate this trend.

Utilizing these new data, this project would like to explore important research questions in labor economics and behavioral economics and conduct exploratory research both theoretically and empirically. Furthermore, by tying up with companies, I also would like to measure the effectiveness of personnel measures exploiting quasi-experimental settings. Specifically, during the research period, we focus on seven categories: the gender gap, working style reform, the effect of corporate training programs, mental health, hiring and matching, measuring the ability of middle managers, and innovation within organizations.

### < Major Research Results >

#### Discussion Paper

 The Effect of Interpersonal Skills on Worker Performance (SATO, Kaori; NAKAMURO, Makiko; OWAN, Hideo) DP 19-E-045

### VII-3

# Fundamental Research for Economic Growth and Productivity Improvement in Japan

Project Leader / NISHIMURA Kazuo, FF

Project Period: June 19, 2017 - May 31, 2019

### < Overview >

The economic growth of Japan has been supported by talented people with high human capital generating innovation. However, the Ministry of Education, Culture, Sports, Science and Technology's White Paper of Science and Technology 2013 states that "the number of articles, which are quantitative indicators of innovation, has been decreasing......it is greatly lowered in the world ranking" and pointed out that research and development capabilities have declined in Japan in recent years.

The number of Japanese patent applications declined by more than 10% in 2014 from its peak in 2005. In addition, per capita national income and the number of engineering papers published also declined sharply in the second half of the 2000s. From this trend, it is viewed that, in Japan, educational investment does not sufficiently support the competitiveness and economic growth of the country.

In this research, we analyze the role of human capital in economic growth from an empirical as well as theoretical viewpoint. Specifically, we look at the economic system as a complex system, analyze the roles that human capital plays in economic growth and business cycles, and analyze how education and child rearing factor in accumulating human capital. Furthermore, our research topics include neuroeconomics. We will perform personal brain activity measurements and study how the perception of economic agents affects learning and decisionmaking.

### **VII-4**

## Empirical Studies on Employment, Migration, and Family Issues of Foreigners in Japan

Project Leader / LIU Yang, F

Project Period: March 26, 2018 - February 29, 2020

#### < Overview >

With the background of globalization and the advance of the Fourth Industrial Revolution, firms' demand for foreign labor has increased greatly. Recently in Japan, attracting skilled foreigners has been part of the country's economic growth strategy, and the number of foreign workers has grown significantly in the past few years. However, as a country with a very small number of foreigners for decades, many issues related to foreigners in Japan, including their employment, migration, and family decisions, are not clear. Furthermore, although the number of foreigners has increased greatly, many problems remain which reduce the attractiveness of working and living in Japan: most of those problems are not limited to foreigners but affect all of Japanese society. This project is designed to tackle the following issues: first, it examines the employment of highly skilled foreign workers, focusing on the determinants of wage levels and factors that affect their job satisfaction. Second, several approaches are applied to resolve issues of migration decisions of skilled foreign laborers in Japan, including macroeconomic, microeconomic, and sociological. Third, it provides analysis on the family issues of foreigners in Japan, such as child education and female labor participation. The purpose of this project is to provide empirical evidence and suggestions on how to take better advantage of foreign labor in the Japanese economy and society, as well as contributing to academic contributions on migration studies.

### < Major Research Results >

### Discussion Papers

- Relative Wages and Job Satisfaction of Migrant Workers: An Economic Perspective Using Data from Japan (LIU, Yang) DP 19-E-033
- Does It Matter Where You Invest? The Impact of FDI on Domestic Job Creation and Destruction (NI, Bin; KATO, Hayato; LIU, Yang) DP 20-E-008
- The Disparity in High School Enrollment between Native and Immigrant Children in Japan (HAGIWARA, Risa; LIU, Yang) DP 20-E-016
- Labor Force Participation of Married Female Immigrants: Evidence from a Low Female-LFPR Host Country (LIU, Yang; HAGIWARA, Risa) DP 20-E-019

#### Survey Report

• Examining Support for Foreign Students Studying in Japan: Data from Surveys of Foreign Student Job Hunting Patterns and University Career Support (TAMURA, Kazuya; ISHII, Daichi; ZENG, Austin; NGUYEN, Thi Thu Thao) Vol.7

### VII-5

### Productivity Effect of HRM Policies and Changing Employment System

Project Leader / OWAN Hideo, FF

Project Period: July 1, 2019 - June 30, 2021

### < Overview >

This project plans to contribute to theoretical and empirical research of labor economics and behavioral economics by utilizing internal business data such as personnel records and field experiments in workplaces. We also aim to identify important research questions related to the current policy issues and explore new approaches in both theoretical and empirical domains. Specifically, the following thirteen research questions will be investigated.

1. What practices are causing gender disparities?

- 2. What impact do interpersonal skills training or transfers within organization have on productivity and innovation?
- 3. How do workers' personalities affect their mental health?
- 4. How much and in what way can process rationalization through visualizing business flows affect productivity?
- 5. How do managers affect their teams' productivity?
- 6. What effect do placements of senior employees under the continuous employment system have on them and their colleagues?
- 7. How does quitting smoking affect the productivity and satisfaction of workers and colleagues?
- 8. How do better food content and more exercise affect workers' health and productivity?
- 9. What is the relationship between management and human capital of sake breweries and their innovation?
- 10. What kind of working style reforms have been done at Japanese firms and what are their effects?
- 11. How do workers' working schedule characteristics and supervisors' behavioral characteristics affect workers' mental health?
- 12. Do workers who voluntarily move to other positions internally perform better than those who are transferred by fiat?
- 13. What is the overall effect of expatriate staffing, and what conditions influence the effectiveness of knowledge transfer from the parent company in multinational corporations?

These studies would lead to more insights into the relationship between differences in management and productivity differences, the causes of gender disparities, the value of non-cognitive ability in the labor market, and peer effects in the workplace. We also discuss what labor policies are effective and what policy incentives need to be offered to encourage firms to adopt them.

### VII-6

# Fundamental Research for Economic Growth and Productivity Improvement in Japan

Project Leader / NISHIMURA Kazuo, FF

Project Period: July 22, 2019 - June 30, 2021

#### < Overview >

The number of Japanese patent applications continues to decline since its peak in 2005. In addition, per capita national income and the number of science and engineering papers published also declined sharply in the second half of the 2000s. From this trend, it is evident that there is insufficient investment in education in Japan to bolster the competitiveness and economic growth of the country. The economic growth of Japan has always been supported by innovation produced by talented people with high human capital. However, the Ministry of Education, Culture, Sports, Science and Technology's White Paper of Science and Technology 2018 states that "Japan's international status seems to be on a declining trajectory in terms of research capabilities, evident in a decrease in the number of articles published and a decrease in the international share of the number of citations in the top 10% of articles, which is one of the indicators of the quality of articles. In March 2017, Nature magazine also pointed out that Japan's scientific research has stalled in recent years, evidenced by a decline in the international share of scientific articles."

The White Paper also stated "Needless to say, it is 'individuals' that supported the research findings linked to the Nobel Prize and also excellent research results in a wide range of fields in Japan. Human resources capable of generating new information and value and accelerating innovation are the cornerstones of fundamental power," and emphasized the importance of accumulating human capital. Based on these trends, investment in education in Japan is considered not to be sufficiently boosting the competitiveness and economic growth of the country.

In this research, we analyze the role of human capital in economic growth from both empirical and theoretical perspectives. Specifically, we look at the economic system as a complex system, analyze the roles that human capital plays in economic growth and business cycles, and that education and child-rearing play in the accumulation of human capital.

### < Major Research Results >

### Discussion Paper

 Life and Work Satisfaction and the Ability to Change Behavior—An Empirical Study in Japan (NISHIMURA, Kazuo; YAGI, Tadashi) DP 20-J-004

### **VII-7**

## Research on Working-style Reform, Health and Productivity Management

Project Leader / KURODA Sachiko, FF

Project Period: August 12, 2019 - July 31, 2021

### < Overview >

We empirically investigate how the ways of working in Japanese firms affect workers' mental and physical health. We also focus on firm health and productivity management by examining how workers and companies sustainably and healthily create the human capital necessary to increase labor productivity. Taking advantage of the findings in labor economics, occupational health psychology and epidemiology, we use a variety of micro-data of firms and employees to derive academic and policy implications.

### **Other Research Results in Program VII**

### < Research results independent from any research project >

#### Policy Discussion Paper

 Does new technology change the way we work? Prospect in the AI era (TSURU, Kotaro) PDP 19-P-023

< Research results belonging to research projects prior to FY2019 >

# Research on Working Style Reform and Health Management

Project Leader / YAMAMOTO Isamu, FF

Project Period: December 9, 2016 - November 30, 2018

#### Discussion Paper

 Impact of the Work-style Reform on Overtime Hours and Self-training Time: Evidence using Japanese time-use data (KURODA, Sachiko; YAMAMOTO, Isamu) DP 19-J-022

### Program



## Law and Economy



Acting Program Director

YANO Makoto

Technological innovation is expected to accelerate in many fields such as financial services, information/communications, and life sciences. In such an environment, what can a nation do to build an economy that leads the world in innovation? Many cases have been observed where important innovation is born in a market in which free entry and free enterprise are guaranteed. In order to foster such a market, various rules and institutional arrangements need to be built into the economy. From this viewpoint, in the present program, the design of new types of economic and industrial policies is investigated.

### Introduction of Research Projects

### VIII-1

# Frontiers in Corporate Governance Analysis (FY2017)

Project Leader / MIYAJIMA Hideaki, FF

Project Period: August 14, 2017 - July 31, 2019

### < Overview >

As the Stewardship Code and Corporate Governance Code are executed, governance reform in Japan in principle will enter a new phase of maintaining effective enforcement stemming from the formal arrangements. In order to enhance the performance (earning capability) of Japanese firms further, the reforms should contribute to encouraging research and development (R&D). human capital investment, mergers and acquisitions (M&A), corporate restructuring, and selection of appropriate financial policies, all of which form the base of corporate innovation. However, there is limited research that examines the extent and the channels through which such changes in governance arrangement have influenced corporate behavior. It is also unclear whether the reforms based on the U.S. model are indeed compatible with other economic institutions in Japan such as the long-term employment system, and whether those reforms would induce myopic behavior by firms through excessive external pressure. Considering such problems, this project will highlight the effect of changing governance arrangements on various phases of corporate innovative activities including R&D, human investment, M&A, restructuring, and capital and organizational choice.

### < Major Research Results >

### Discussion Papers

- Stewardship Code, Institutional Investors, and Firm Value: International Evidence (SHIRAISHI, Yutaro; IKEDA, Naoshi; ARIKAWA, Yasuhiro; INOUE, Kotaro) DP 19-E-077
- Does Regulation Matter? : Effects of Corporate Governance Reforms on Relational Shareholding in Japan (JIDINGER, Johan; MIYAJIMA, Hideaki) DP 20-E-003
- Outside Directors (Auditors) Affiliated through Interlocking Shareholding and Firm Value (XU, Peng; TAKAHASHI, Hidetomo; TANAKA, Wataru) DP 19-J-050
- Policy Discussion Paper
- Corporate Governance Reform under Abenomics (MIYAJIMA, Hideaki; SAITO, Takuji) PDP 19-P-026

### **VIII-2**

# Frontiers in Corporate Governance Analysis (FY2019)

Project Leader / MIYAJIMA Hideaki, FF

Project Period: September 2, 2019 - August 31, 2021

### < Overview >

As the Stewardship Code and Corporate Governance Code are executed, governance reform in Japan in principle will enter a new phase of improving effective enforcement under the newly established formal arrangements. In order to enhance the performance (earning capability) of Japanese firms further, the reforms should contribute to encouraging research and development (R&D), human capital investment, mergers and acquisitions (M&A), corporate restructuring, and selection of appropriate financial policies, which together form the base of corporate innovation. However, there is limited research examining the extent and the channels through which such changes in forms of governance have influenced corporate behavior. It is also unclear whether the reforms based on the U.S. model are indeed compatible with other economic institutions in Japan such as the long-term employment system, or whether those reforms would induce myopic behavior by firms through excessive external pressure. Considering such problems, this project will highlight the effect of changing forms of governance on various phases of corporate innovative activities including R&D, human investment, M&A, restructuring, and capital and organizational choice.

### < Major Research Results >

### RIETI International Workshop

"JSPS Core-to-Core Program: 'Governance Reforms from Comparative Perspectives' Day 1: RIETI Workshop 'Capital Market and Control'" (November 5, 2019) See P.81

#### Seminar

"International Seminar on 'Governance Reforms from Comparative Perspectives'" (November 6-7, 2019) See P.71

### VIII-3

## Evidence-based Policy Study on the Law and Economics of Market Quality

Project Leader / FURUKAWA Yuichi, FF

Project Period: March 12, 2018 - February 29, 2020

### < Overview >

As Makoto Yano explains in his previous work, high quality markets are vital for the healthy growth of a modern economy. In order to develop a high quality market, it is important to take a roundabout approach or, in other words, to design various parts of what Yano calls market infrastructure (e.g., laws, institutions, policies, and culture), allowing the market to function in a heathy manner. For this purpose, it is crucial first to measure the quality of a particular market and its relationship to market infrastructure correctly. The present study aims to capture the relationship between market quality and market infrastructure by constructing and utilizing new big panel data. We will feed those empirical results into theoretical modelling, by which we will study the comprehensive design of laws, institutions, and policies with which the economy grows in a healthy manner. It is hoped that this research will lead to new approaches in law and economics.

#### < Major Research Results >

### Discussion Papers

- A New Theory of Money: From Ancient Japanese Copper Coins to Virtual Currencies (YANO, Makoto) DP 19-E-062
- Market Quality Theory and the Coase Theorem in the Presence of Transaction Costs (YANO, Makoto) DP 19-E-097
- Economic Black Holes and Labor Singularities in the Presence of Self-replicating Artificial Intelligence (YANO, Makoto; FURUKAWA, Yuichi) DP 20-E-009

#### Policy Discussion Papers

- Creation of a Blockchain and a New Ecosystem (YANO, Makoto; DAI, Chris; MASUDA, Kenichi; KISHIMOTO, Yoshio) PDP 19-P-029
- Blockchain Business and its Regulation (YANO, Makoto; DAI, Chris; MASUDA, Kenichi; KISHIMOTO, Yoshio) PDP 19-P-030

### **VIII-4**

### Research on Political Behavior and Decision Making: Searching for evidence-based solutions to political challenges in the economy and industry

Project Leader / ONO Yoshikuni, FF

Project Period: May 7, 2018 - June 30, 2020

### < Overview >

This project examines how changes in social conditions (e.g., state of the economy, risks, and foreign threats) and information about policies and political actors (e.g., gender, campaign pledges, and facial expressions of political candidates) affect people's decisions and behavior by conducting opinion polls, experiments, and text data analyses.

### < Major Research Results >

#### Discussion Papers

- Neoliberalism and Negative Attitudes toward Immigrants (IGARASHI, Akira; ONO, Yoshikuni) DP 19-E-085
- The Effects of Negative and Positive Information on Attitudes toward Immigration (IGARASHI, Akira; ONO, Yoshikuni) DP 20-E-023

### **Other Research Results in Program VIII**

< Research results independent from any research project >

- Policy Discussion Paper
- Markets and Laws that support the digital era (YANO, Makoto) PDP 19-P-024

### Program



## Policy History and Policy Assessment



Program Director

**TAKEDA** Haruhito

This program aims to review and assess policy shifts, chiefly during the period 1980-2000, as we look at the roles played by Japan's economy and society as well as its trade and economic industrial policies at the end of the 20th century. While the final two decades of the 20th century were a time of significant changes in Japan's economy and society, they also represent an important point of comparison when considering the development of policy after the creation of the Ministry of Economy, Trade and Industry from a historical perspective. We will attempt to clarify how changes in trade and industrial policy at the turn of the century were affected, based on the recognition of policy issues over the preceding quarter-century, choice of policy responses, and evaluation of their results.

### Introduction of Research Projects

### **IX-1**

### Industrial Revitalization and the Role of Finance: The history of Japanese economic policies in the 1990s-2000s

Project Leader / TAKEDA Haruhito, FF

Project Period: February 12, 2019 - January 31, 2021

### < Overview >

In line with the purpose of the Policy History and Policy Assessment program, we will review and evaluate from a historical approach the industrial revitalization policies developed from the 1990s to the 2000s, focusing on their relationship with the financial sector. Specifically, the study is divided into the following themes.

First, we will review the international environment surrounding the Japanese economy at that time, the actual situation of the Japanese economy and the evolution of economic policies over the period. This will be the basis for a discussion among the project members, and an opportunity to share historical perspectives and discuss differences of opinion between participants. This discussion will also include viewpoints that would approximate the positions held by foreign policymakers at the time, such as those in the United States. Our analysis of the economic policies will include economic and industrial policies, fiscal and monetary policies, deflationary measures, and so on.

Secondly, we will analyze the policy objectives, policy instruments, implementation details and policy effects of the industrial revitalization policies, focusing on the financial aspects and roles of finance. In addition to METI (Ministry of Economy, Trade and Industry), interviews will be conducted with MOF (Ministry of Finance), the former IRCJ (Industrial Revitalization Corporation of Japan) and the former Innovation Network Corporation of Japan, and industry and corporate stakeholders in order to create research materials. We will also attempt to shed more light on these policies through an international comparison.

Thirdly, we will integrate the above-mentioned first and second research findings to grasp the significance of this set of policies from an overall perspective of the Japanese economy. What circumstances was Japan situated in at the time, what was the range of policy choices that existed, which did Japan choose and how and which options were unworkable? We will also analyze these issues taking into consideration differences in the vision of the public and private sectors, role sharing between public and private sectors, mutual verification systems and governance.

### < Major Research Results >

### Discussion Papers

- Monetary policy in Japan: A review of the Heisei Period (TAKAHASHI, Wataru) DP 19-J-055
- Changes in the Global Financial Environment Surrounding Japan in the 21st Century: Foreign Exchange Policy and International Financial Coordination (IDO, Kiyoto) DP 19-J-056

### **IX-2**

### **Historical Evaluation of Industrial Policy**

Project Leader / OKAZAKI Tetsuji, FF

Project Period: October 9, 2018 - September 30, 2020

### < Overview >

This project evaluates industrial policies by MITI (Ministry of International Trade and Industry: reorganized into METI in 2001) and METI quantitatively, integrating economic analysis and historical study. First, we analyze policy-based finance for small sized firms. Specifically, we focus on the Program for Management Improvement of Small-Sized Firms (Marukei Yushi), which dates back to 1973. According to this program, Japan Finance People's Finance Corporation (presently Japan Finance Corporation) provided low interest rate loans to the small-sized firms that were advised and recommended by regional chambers of commerce. As this program is for small-sized firms, which are supposed to be under strict credit constraints, it is possible that this program improves management and promotes growth of small firms by mitigating the constraints. We test this possibility using micro-data on this program. Second, we examine the regional development policy in the 1960s. The Comprehensive National Development Plan (Zenkoku Sogo Kaihatsu Keikaku) in 1962 and the two laws based on it, namely, the NEW Industrial Cities Development Promotion Law (Shin Sangyo Toshi Kensetsu Sokushin Ho, 1962) and the Special Industrial Areas Development Promotion Law (Kogyo Seibi Tokubetsu Chiiki Seibi Sokushin Ho, 1964), were a large-scale policy endeavor to change the spatial distribution of industries. As there were extensive inputs from local governments and politicians in policymaking, this series of policies are interesting not only in the context of the industrial policy research but also in the context of spatial economics, economic history, and political economy. In this project, we evaluate them using the relevant statistical data and historical information.

### **IX-3**

# Establishing Evidence-Based Policy Making in Japan

Project Leader / YAMAGUCHI Kazuo, VF

Project Period: April 15, 2019 - March 31, 2021

### < Overview >

In the preceding research project "Promoting Evidence-based Policy in Japan", we studied how to promote evidence-based policy making (EBPM) in Japan. EBPM has also been introduced and promoted in central and local governments since 2017, which is when the preceding project was started. The examples of the U.S. and UK as the first advanced, overseas cases of the EBPM permeation, have also spurred interest within Japan. The following issues, however, remain: (1) how can Japan adopt EBPM into the existing policy formations and evaluations, (2) how can EBPM be promoted in existing individual policy implementations, and (3) how can cooperation and coordination between policymakers and academic scholars be promoted?

This project will advance the following: (1) We will research

methods of establishing and promoting EBPM in Japan. Specifically, by conducting research on the advanced overseas cases of its implementations, we will create the institutional design for establishing EBPM in Japan and formulate related guidelines for government administrators. (2) We will create more opportunities that enhance the benefits for both policymakers and researchers to cooperate in creating individual cases of applying EBPM. (3) We will disseminate the outcomes of our research through symposiums, BBL seminars, columns and books in order to promote awareness about the importance of EBPM among policymakers, government administrators, researchers and the general public.

### < Major Research Results >

### Discussion Paper

 Early Evacuation Promotion Nudges for Heavy Rain Disasters (OHTAKE, Fumio; SAKATA, Kiriko; MATSUO, Yuta) DP 20-J-015

### RIETI EBPM Symposium

"To Advance Evidence-Based Policy Making" (December 25, 2019) See P.5/P.72



### **IX-4**

### The Future Direction of Corporate Taxation

Project Leader / SATO Motohiro, FF

Project Period: June 3, 2019 - May 31, 2021

### < Overview >

Under the Abe administration, the Japanese government has reduced the effective corporate tax rate to under 30% through the revision of special tax measures and expansion of external taxation, instituting "Growth-oriented Tax Reform" to increase Japan's competitiveness. The tax reform was expected to encourage wage increases and enhance business investment. Recently, however, economic activity and taxation systems are changing rapidly under the influence of globalization and digitalization, and it is necessary to discuss the future direction of corporate taxation suited to the current climate.

This research has two objectives; (1) quantitative analysis of past tax reform and future taxation based on corporate data, and (2) in order to strengthen growth-oriented development, conduct a study and discuss the future of corporate taxation through the study group.

## **Special Projects**

Special Projects are independent from the prior nine Research Programs.

### Introduction of Research Projects

### **SP-1**

### Survey of International Trends and Discussions in Greenhouse Gas Emission Reduction Projects under the UN Framework Convention on Climate Change

Project Leader / KAINOU Kazunari, F

Project Period: September 14, 2011 -

### < Overview >

Under the United Nations Framework Convention on Climate Change (UNFCCC), parties to the Kyoto Protocol, including Japan and the European Union, are allowed to use the Kyoto Mechanisms—emissions trading, Joint Implementation (JI), Clean Development Mechanism (CDM), etc.—in the first commitment period from 2008 to 2012 in addition to their domestic activities to achieve their respective greenhouse gas (GHG) emission reduction commitments. Specifically regarding CDM and JI, under which investments in emission reduction projects in third countries can be taken as emission credits, various problems have been pointed out and, accordingly, discussions are now underway to make changes to the mechanisms.

In the 16th Conference of Parties (COP-16) to the UNFCCC held in Cancun, Mexico in 2010, a new framework differing from that of the Kyoto Protocol and involving the participation of the United States, China, and other developing countries was set up as part of the Cancun Agreement. Under the new framework, participating countries or regions would voluntarily set GHG emission reduction targets, and the achievement of the targets would be made subject to multilateral review. It was also agreed that a new set of flexible mechanisms, similar to the Kyoto Mechanisms be institutionalized under the new framework. However, the specifics of such flexible mechanisms have yet to be worked out.

This survey seeks to investigate, analyze, and evaluate the progress going forward in reforming the Kyoto Mechanisms under the Kyoto Protocol, and moves toward that in developing a new mechanism with an aim to put forward international policy proposals for efficient and effective GHG emission reductions in the future.

### **SP-2**

### **RIETI Data Management Project**

Project Leader / SEKIGUCHI Yoichi, SF

Project Period: April 1, 2015 -

### < Overview >

The data in RIETI's possession can be categorized as follows: data available at relatively low cost, which research institutions would ordinarily be expected to have on hand; large-scale datasets purchased by individual research projects for use in their research; and data generated by these research projects (including the results of questionnaire surveys). The purpose of this project is to develop infrastructure for facilitating more efficient utilization of these datasets by users. An additional purpose of this project is to serve as a forum for active policy discussion of related topics, with an eye to considering the possibility of sharing these datasets and developing methods of making these datasets available to both researchers and the public at large as a source of new knowledge.

### < Major Research Results >

### Discussion Paper

 Foreign Direct Investment and International R&D Collaborations in Japanese Multinational Enterprises (IKEUCHI, Kenta) DP 20-J-012

### SP-3

## Study on the Medium- to Long-term Social Security System

Project Leader / OSHIO Takashi, FF

Project Period: October 2, 2017 - September 30, 2019

### < Overview >

As a follow-up of the preliminary report by the Ministry of Economy, Trade and Industry (METI)'s Vice-Minister and young officials project, this research investigates a variety of issues related to the medium- to long-term social security and tax systems in Japan. The specific topics are as follows:

- 1) Reconsidering the definition of elderly people and constructing a lifelong working society.
- 2) Conversion toward self-supporting healthcare and long-term care systems.
- Desirable allocation of additional revenue raised from the consumption tax rate hike focusing on child rearing and education expenditures.

< Major Research Results >

### Discussion Paper

- Addressing the Institutional Disincentives to Elderly Employment in Japan (OSHIO, Takashi; SHIMIZUTANI, Satoshi; OISHI, Akiko) DP 19-E-080
- RIETI International Seminar
  "Frontiers of Behavioural Insights" (May 22, 2019)

### **SP-4**

### Comprehensive Research on Evidence-Based Policy Making (EBPM)

Project Leader / SEKIZAWA Yoichi, SF

Project Period: October 29, 2018 - March 31, 2025

### < Overview >

This research project conducts empirical studies on the effects of economic and industrial policies, which include studies conducted in the EBPM unit established in FY2018 as well as other studies related to policy evaluation that do not belong to existing research projects. In other words, this project is an umbrella of EBPM-related studies conducted at RIETI.

In the process of this research project, we aim to cooperate closely with government officials and researchers in this field. In some cases, we invite policy practitioners to participate in this project to improve their expertise related to EBPM.

< Major Research Results >

### Discussion Paper

• Do Trade Fairs Promote Export? (MAKIOKA, Ryo) DP 20-E-007

### SP-5

# Research on New Technologies, Economic Growth, and Industrial Structure

Project Leader / NIREI Makoto, FF

Project Period: November 12, 2018 - October 31, 2020

### < Overview >

The evolution of information technology continues to drive the long-term transformation of economic structures and poses new challenges to macroeconomic research and policy. The ongoing change in industrial structure manifested by the shift from the manufacturing to the service sector continues to gain momentum, and a further shift in employment structure is expected. Moreover, many industries are facing drastic changes in their business models, which led some researchers and policymakers to anticipate a discontinuous change in industrial and employment structure in the near future. In this project, we respond to these technological developments which call for new insights and statistical measurements in macroeconomic studies.

### **SP-6**

See P.77

### **Empirical Research on Policy Uncertainty in Japan**

Project Leader / ITO Arata, F

Project Period: July 1, 2019 - June 30, 2021

### < Overview >

This research project has the following two objectives:

- Produce indices of policy-related economic uncertainty in Japan by policy area. The areas include social security, the pension program, the healthcare insurance system, the nursing care insurance program, taxes, government spending, the labor market system, environmental regulation, consumer protection regulation, and financial regulation.
- 2. Examine the relationship between policy uncertainty, business decisions and firm productivity across policy categories by using these newly created indices and firm-level data.

We will derive some policy implications for firm productivity in Japan from our empirical results.

### < Major Research Results >

### Policy Discussion Paper

 Structural Changes in Japanese SMEs: Business Dynamism in Aging Society and Inter-Firm Transaction Network (HONG, Gee Hee; ITO, Arata; SAITO, Yukiko; NGUYEN, Thi-Ngoc Anh) PDP 20-P-003

### **Multidisciplinary Research Results**

< Research results independent from any research project >

### Discussion Papers

- How Does Unconventional Monetary Policy Affect the Global Financial Markets?: Evaluating Policy Effects by Global VAR Models (INOUE, Tomoo; OKIMOTO, Tatsuvoshi) DP 19-E-031
- Uncertainty-Dependent and Sign-Dependent Effects of Oil Market Shocks (NGUYEN, Bao H; OKIMOTO, Tatsuyoshi; TRAN, Trung Duc) DP 19-E-042
- Firms' Subjective Uncertainty and Forecast Errors (MORIKAWA, Masayuki) DP 19-E-055
- Effects of Outside Directors on Firms' Investments and Performance: Evidence from a Quasi-Natural Experiment in Japan (MORIKAWA, Masayuki) DP 19-E-072
- Price Competition vs. Quality Competition: Evidence from a Survey (MORIKAWA, Masayuki) DP 19-E-075
- Uncertainty in Long-Term Macroeconomic Forecasts: Ex post Evaluation of Forecasts by Economics Researchers (MORIKAWA, Masayuki) DP 19-E-084
- A Comparative Study of Gender Inequality: Occupational segregation in Japan and Korea (YOUM, Yoosik; YAMAGUCHI, Kazuo) DP 19-E-093
- Meritocracy and Its Discontent: Long-run Effects of Repeated School Admission Reforms (TANAKA, Mari; NARITA, Yusuke; MORIGUCHI, Chiaki) DP 20-E-002
- Heterogeneous Relationships between Automation Technologies and Skilled Labor: Evidence from a Firm Survey (MORIKAWA, Masayuki) DP 20-E-004
- Data Sharing and Revenue Distribution Rule (OGURO, Kazumasa; ISHIDA, Ryo; YASUOKA, Masava) DP 20-E-015
- The Political-Economy Trilemma (AIZENMAN, Joshua; ITO, Hiroyuki) DP 20-E-018
- Elderly Care Supply Systems and Services which Decrease Elderly Care Requirements (OGURO, Kazumasa; ISHIDA, Ryo; YASUOKA, Masaya) DP 20-E-020
- A Study on the Aging Policy in the Context of Economic and Social Structural Transformation Based on a Field Survey of Welfare Facilities for the Elderly in District J, City F, Guangdong Province, China (MENG, Jianjun) DP 19-J-026
- Impact of the Corrections to the Monthly Labor Survey Data on Productivity Analysis (MORIKAWA, Masayuki) DP19-J-029
- Effects of Outside Directors on Firms' Investment Behavior and Performance: Evidence from a Quasi-Natural Experiment in Japan (MORIKAWA, Masayuki) DP 19-J-030
- Subjective Uncertainty and Forecast Errors of Firms (MORIKAWA, Masayuki) DP 19-J-035
- Use of AI and Its Impact on Business: Updated Evidence from a Firm Survey (MORIKAWA, Masayuki) DP 19-J-045
- Price Competition vs. Quality Competition: Evidence from a Survey (MORIKAWA, Masayuki) DP 19-J-046
- How does firm heterogeneity affect gender disparity in earnings: How does women's selection of their employers affect the present and future gender disparity in earnings? (YAMAGUCHI, Kazuo) DP 19-J-052
- An increase of welfare and a decrease in taxi demand: why have wages of taxi drivers been stagnant for decades in Japan? (HASHIMOTO, Yuki; KOMAE, Kazutomo) DP 19-J-053

- Are Consumer Confidence Index and Asset Value Prediction affected by the Number of Daylight Hours? : Examination of the SAD (Seasonal Affective Disorder) Hypothesis (SEKIZAWA, Yoichi; KONISHI, Yoko) DP 19-J-057
- Uncertainty in Long-Term Economic Forecasts (MORIKAWA, Masayuki) DP 19-J-058
- Improvement and Integration of Electricity Policy Impact Assessment Model— Enabling Estimation of Japanese Prefecture-based Local Electricity and Ancillary Service Supply, Demand and Currency Flow in Kyushu Area (KAINOU, Kazunari) DP 19-J-060
- New Methodology for Difference-In-Difference Where Both No Auto-correlation Assumption And Stable Unit Treatment Value Assumption May Not Hold In Policy Impact Assessment (KAINOU, Kazunari) DP 19-J-065
- Use of AI, Work Style Reform, and Productivity: Evidence from an Individual-Level Survey (MORIKAWA, Masayuki) DP 20-J-016
- Analysis of the Public Sector Wage Premium in Japan—Evidence from PIAAC Cognitive Skill Data—(ARAKI, Shota) DP 20-J-017

### Policy Discussion Papers

- Minimum Wages and Productivity: An Overview and Evidence from Japan (MORIKAWA, Masayuki) PDP 19-P-012
- Results of a survey on standardization activities: Japanese institutions' standardization activities in 2017 (Implementation, knowledge source, organizational structure, and interest to artificial intelligence) (TAMURA, Suguru) PDP 19-P-013
- Minimum Wages and Productivity: Evidence from Japan (MORIKAWA, Masayuki) PDP 19-P-015
- · Global Rulemaking Strategy for Implementing Emerging Innovation: Case of Medical/Healthcare Robot, HAL by Cyberdyne (IKEDA, Yoko; IIZUKA, Michiko) PDP 19-P-016
- Reducing Administrative Costs from the Standpoint of Businesses (ISHIZAKI, Takashi) PDP 19-P-033
- Draft for Industrial Promotion in a Super-aged Society (FUJI, Kazuhiko) PDP 19-P-036
- Consumers' Reaction to the Consumption Tax Hike and Related Policies: Evidence from a Survey (MORIKAWA, Masayuki) PDP 20-P-008
- (Tentative) Proposal of Classification Items for Support Services for the IP Support Desk, which Could Be the Basis of EBPM in Measures Supporting Intellectual Property Utilization by SMEs (KOBAYASHI, Toru) PDP 20-P-011

### RIETI Special BBL Seminars

"Carbon Recycling Based on the Photocatalysis Technology" (April 11, 2019) See P.68

"The G20 and the World Economy: Performance and prospects" (October 17, 2019) See P.71

"ADB Asian Economic Integration Report 2019/2020—Demographic change, productivity, and the role of technology" (November 13, 2019) See P.71

"Can the WTO Survive? Rule of law in the multilateral trading system and See P.72 Japan's role" (December 9, 2019)

"Considering the Shape of This Country: Reflection and discussions on parliamentary democracy in Japan and the UK" (March 19, 2020)\* See P.74

### RIETI Open BBL Seminars

"2019 White Paper on Small, Medium, and Micro-sized Enterprises in Japan: Towards the success of SMEs and micro businesses in the Reiwa era" (May 23, 2019) See P.68

"Outline of the 2019 White Paper on Manufacturing Industries (Monodzukuri): Strategies for strengthening our manufacturing industries' competitiveness in the changing environment" (June 20, 2019) See P.68

"White Paper on International Economy and Trade 2019: The current	t global
economy and challenges to free trade" (July 25, 2019)	See P.69

"The New Platform for Japan-Taiwan Relations and Advanced Technology Exchange" (September 30, 2019) See P.70

"Beyond TICAD7—Opportunities in powering African industrial development through UNIDO Energy (DOE)" (December 19, 2019) See P.72

"Managing Currency Risk" (December 26, 2019) See P.73

"New Development of 'Business Support Library' Useful for Regional Revitalization" (January 15, 2020) See P.73

"New Renewable Energy Technology Development through Industry-Government-Academia Collaboration: To compete with the world" (January 29, 2020) See P.73

"Current Status, Prospects and Challenges of Impact Investing in Japan" (February 6, 2020) See P.74

"Critical Ideas in Confronting the Revolutionary Era of 5G & DX Technologies" (February 12, 2020) See P.74

### The 21st RIETI Highlight Seminar

"Thinking About Widening Gaps in the Reiwa Era—What will happen to corporate governance and wage gaps?" (July 18, 2019) See P.69



### The 22nd RIETI Highlight Seminar

"Productivity and Long-term Stagnation—What should economic policy do in the future?" (November 27, 2019) See P.72



### T20 Japan Associated Event

"T20-G20 Roundtable Discussion on 'Digital Trade, WTO Reform, and Trade and Investment for Sustainable and Inclusive Growth'" (April 9, 2019) See P.76

### RIETI T20-G20 Symposium

"Free Trade and Data Free Flow with Trust (DFFT): Challenges and strategies for Japan" (July 5, 2019) See P.68



### METI-RIETI Policy Symposium

"Corporate Governance for Global Companies: Toward an increase in corporate value" (September 2, 2019) See P.4/P.69



### RIETI Open Seminar

"American Views on Trade, the Economy and the Upcoming U.S. Election in Year Three of the Trump Administration" (September 11, 2019) See P.69



### TIER-RIETI-KIET Workshop

"Trade Tensions: Rising protectionism and supply chain" (October 2, 2019) See P.80



### RIETI Blockchain Symposium

"Next Blockchain: Creation of a new ecosystem for future industries" (October 7, 2019) See P.3/P.70

### RIETI-ANU Symposium

"Asian Integration and the Global Economy: Economics of geopolitics" (November 21, 2019) See P.4/P.71

### RIETI Policy Symposium

"The Fourth Industrial Revolution and Japan's Economic Outlook" (February 26, 2020)\* See P.3/P.74

### CEPR-RIETI Webinar

"Economics in the Time of COVID-19: The economic impact on Asia" (March 24, 2020) See P.75

\*The event was held without an audience due to the spread of COVID-19.

### Publications

FUJI Kazuhiko, "End-of-life Satisfaction" in a Super-aged Society with Compassionate Capitalism from Japan, Minerva Shobo Co., Ltd., August 2019

YAMAGUCHI Kazuo, Gender Inequalities in the Japanese Workplace and Employment: Theories and Empirical Evidence, Springer, August 2019

YANO Makoto, Chris DAI, MASUDA Kenichi, KISHIMOTO Yoshio, *Next Blockchain: Creation of a new ecosystem for future industries,* Nikkei Publishing Inc., September 2019

YANO Makoto (Edit), *The Fourth Industrial Revolution and the Japanese Economy: Sustained Growth under a Transforming Economy and Society,* University of Tokyo Press, February 2020

**Discussion Papers** 

Discussion Papers are research results in the form of treatises which in principle have been through an internal review process. To stimulate active debate, they are posted on our website.

Note: Discussion Papers listed below were published from April 2019 to March 2020.

### Discussion Papers written in English https://www.rieti.go.jp/en/publications/act\_dp.html

DP No.	Date	Title	Author(s)	Project No.
19-E-026	April 2019	Missing Growth in the Lost Decade	KODAMA, Naomi (RIETI) LI, Huiyu (Federal Reserve Bank of San Francisco)	VI-Others
19-E-027	April 2019	Topology and Formation of Production Input Interlinkages: Evidence from Japanese microdata	Yoshiyuki ARATA (RIETI) MUNDT, Philipp (University of Bamberg)	V-Others
19-E-028	April 2019	Global Value Chains and Domestic Innovation	ITO, Keiko (Chuo University) IKEUCHI, Kenta (RIETI) CRISCUOLO, Chiara (Organisation for Economic Co-operation and Development (OECD)) TIMMIS, Jonathan (OECD) BERGEAUD, Antonin (Banque de France)	VI-Others
19-E-029	April 2019	Enterprise Resilience to Disasters: Who Needs Public Support?	KASHIWAGI, Yuzuka (Waseda University)	II-2
19-E-030	April 2019	Propagation of Positive Effects of Post-disaster Policies through Supply Chains: Evidence from the Great East Japan Earthquake	KASHIWAGI, Yuzuka (Waseda University) TODO, Yasuyuki (RIETI)	II-2
19-E-031	April 2019	How Does Unconventional Monetary Policy Affect the Global Financial Markets?: Evaluating Policy Effects by Global VAR Models	INOUE, Tomoo (Seikei University) OKIMOTO, Tatsuyoshi (RIETI)	Multidisciplinary
19-E-032	April 2019	Firm Performance and Asymmetry of Supplier and Customer Relationships	FUJII, Daisuke (RIETI) SAITO, Yukiko (RIETI)	III-Others
19-E-033	May 2019	Relative Wages and Job Satisfaction of Migrant Workers: An Economic Perspective Using Data from Japan	LIU, Yang (RIETI)	VII-4
19-E-034	May 2019	Dimensions of Inequality in Japan: Distributions of Earnings, Income and Wealth between 1984 and 2014	KITAO, Sagiri (RIETI) YAMADA, Tomoaki (Meiji University)	I-7
19-E-035	May 2019	Why Japan Lost Its Comparative Advantage in Producing Electronic Parts and Components	THORBECKE, Willem (RIETI)	I-6
19-E-036	May 2019	Effects of Class-Size Reduction on Cognitive and Non-Cognitive Skills	ITO, Hirotake (Keio University) NAKAMURO, Makiko (Keio University) YAMAGUCHI, Shintaro (The University of Tokyo)	VI-5
19-E-037	May 2019	CEOs' Multicultural Experience, Firm Networks and Performance: Evidence from Firm-to-firm Transaction Data in Japan	ITO, Tadashi (Gakushuin University) NAKAMURA, Ryohei (RIETI)	III-3
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19-J-042	August 2019	Choice of Invoice Currency and Exchange Rate Risk Management: 2018 Questionnaire Survey of Japanese Overseas Subsidiaries	ITO, Takatoshi (Columbia University / National Graduate Institute for Policy Studies) KOIBUCHI, Satoshi (Chuo University) SATO, Kiyotaka (Yokohama National University) SHIMIZU, Junko (Gakushuin University) YOSHIMI, Taiyo (Chuo University)	I-2
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19-J-044	August 2019	Non-tariff Measures and Margins of Trade: Evidence from Japanese Manufacturing Firms	OBASHI, Ayako (Aoyama Gakuin University)	VI-2
19-J-045	August 2019	Use of AI and Its Impact on Business: Updated Evidence from a Firm Survey	MORIKAWA, Masayuki (RIETI)	Multidisciplinary
19-J-046	August 2019	Price Competition vs. Quality Competition: Evidence from a Survey	MORIKAWA, Masayuki (RIETI)	Multidisciplinary
19-J-047	August 2019	Relationship between Competition and Outcomes in the Hospital Market	SHOJI, Keishi (Research Bureau, The House of Representatives, Japan) IBUKA, Yoko (Keio University)	VI-5
19-J-048	August 2019	Measuring Prefectural Price Differences of Agricultural Products—Location and Product Quality	TOKUI, Joji (RIETI) MIZUTA, Takeshi (Institute of Economic Research, Hitotsubashi University)	VI-4
19-J-049	August 2019	Management Practices and Labor Productivity in Intensive Care Homes for the Elderly	INUI, Tomohiko (RIETI) KAWASAKI, Kazuyasu (Chuo University) ITO, Yukiko (Tsudajuku University) MIYAGAWA, Tsutomu (RIETI) MANO, Toshiki (Chuo University)	VI-3
19-J-050	September 2019	Outside Directors (Auditors) Affiliated through Interlocking Shareholding and Firm Value	XU, Peng (Hosei University) TAKAHASHI, Hidetomo (Hosei University) TANAKA, Wataru (The University of Tokyo)	VIII-1
19-J-051	September 2019	The effect of management practices on the performance of bus companies	KAWASAKI, Kazuyasu (Chuo University) INUI, Tomohiko (RIETI) MIYAGAWA, Tsutomu (RIETI)	VI-3
19-J-052	September 2019	How does firm heterogeneity affect gender disparity in earnings: How does women's selection of their employers affect the present and future gender disparity in earnings?	YAMAGUCHI, Kazuo (RIETI)	Multidisciplinary
19-J-053	October 2019	An increase of welfare and a decrease in taxi demand: why have wages of taxi drivers been stagnant for decades in Japan?	HASHIMOTO, Yuki (RIETI) KOMAE, Kazutomo (The University of Tokyo)	Multidisciplinary
19-J-054	October 2019	Why Do We Observe a Regional Balassa-Samuelson Effect?	TOKUI, Joji (RIETI)	VI-4
19-J-055	October 2019	Monetary policy in Japan: A review of the Heisei Period	TAKAHASHI, Wataru (Osaka University of Economics)	IX-1
19-J-056	October 2019	Changes in the Global Financial Environment Surrounding Japan in the 21st Century: Foreign Exchange Policy and International Financial Coordination	IDO, Kiyoto (Institute for International Economic Studies)	IX-1
19-J-057	October 2019	Are Consumer Confidence Index and Asset Value Prediction Affected by the Number of Daylight Hours?: Examination of the SAD (Seasonal Affective Disorder) Hypothesis	SEKIZAWA, Yoichi (RIETI) KONISHI, Yoko (RIETI)	Multidisciplinary
19-J-058	October 2019	Uncertainty in Long-Term Economic Forecasts	MORIKAWA, Masayuki (RIETI)	Multidisciplinary
19-J-059	October 2019	The Role of Subsidies in the Innovation Policy Mix—The Case of the Supporting Industry Program in Japan	SUZUKI, Jun (National Graduate Institute for Policy Studies)	IV-1

DP No.	Date	Title	Author(s)	Project No.
19-J-060	October 2019	Improvement and Integration of Electricity Policy Impact Assessment Model—Enabling Estimation of Japanese Prefecture-based Local Electricity and Ancillary Service Supply, Demand and Currency Flow in Kyushu Area	KAINOU, Kazunari (RIETI)	Multidisciplinary
19-J-061	October 2019	Corporate Headquarters as a Resource for Diversification	KAWAKAMI, Atsushi (Toyo University)	VI-3
19-J-062	November 2019	An Interregional Input-Output Model for Estimating the Effects of Regional Revitalization Policy	ISHIKAWA, Yoshifumi (Nanzan University)	III-3
19-J-063	November 2019	Effect of Central City Revitalization Policy on Commerce: Evidence from Establishment-level Data Analysis in Kumamoto	HONDA, Keiichiro (Prefectural University of Kumamoto) KAWANISHI, Takuya (Prefectural University of Kumamoto)	III-2
19-J-064	November 2019	An Empirical Analysis of Sources and Uses of Corporate Saving	FUKAO, Kyoji (RIETI) IKEUCHI, Kenta (RIETI) KIM, Young Gak (Senshu University) KWON, Hyeog Ug (RIETI)	VI-Others
19-J-065	November 2019	New Methodology for Difference-In-Difference Where Both No Auto-correlation Assumption And Stable Unit Treatment Value Assumption May Not Hold In Policy Impact Assessment	KAINOU, Kazunari (RIETI)	Multidisciplinary
19-J-066	November 2019	Employment and Productivity Dynamics in Japan: Contribution to the OECD DynEmp/MultiProd Project and International Comparisons	IKEUCHI, Kenta (RIETI) ITO, Keiko (Chuo University) FUKAO, Kyoji (RIETI) KWON, Hyeog Ug (RIETI) KIM, Young Gak (Senshu University)	VI-Others
19-J-067	December 2019	Restrictions on outbound data transfer based on Government Access in foreign countries—The current situation, Regulation by International Trade Law and Implications for DFFT—	WATANABE, Shota (Nomura Research Institute)	II-5
19-J-068	December 2019	How Does ICT Investment Affect Employment and Productivity? Evidence from a Japanese Tax Incentive	TAKIZAWA, Miho (Gakushuin University) MIYAKAWA, Daisuke (Hitotsubashi University)	VI-3
19-J-069	December 2019	Does Compact City Policy Benefit Incumbent Retailers? Evidence from Toyama City	IWATA, Shinichiro (University of Toyama) KONDO, Keisuke (RIETI)	111-2
19-J-070	December 2019	The Impact of Regional Bank Consolidation on Regional Economies: Evidence from Data on the Location of Bank Branches at the Municipal Level	HARIMAYA, Kozo (Ritsumeikan University) OZAKI, Yasufumi (Kushiro Public University)	III-5
20-J-001	January 2020	Contributions of Corporate Basic Research and Research Collaboration with Academia to Innovation and Spillover Performance in Japan	NAGAOKA, Sadao (RIETI) EDAMURA, Kazuma (Kanagawa University) ONISHI, Koichiro (Waseda University) TSUKADA, Naotoshi (University of Niigata Prefecture) NAITO, Yusuke (Artificial Life Laboratory, Inc.) KADOWAKI, Ryo (Hitotsubashi University)	IV-1
20-J-002	January 2020	Results and discussion of "Survey on SME preparations for natural disasters and support by regional financial institutions"	YAMORI, Nobuyoshi (RIETI) OGAWA, Hikaru (The University of Tokyo) YANAGIHARA, Mitsuyoshi (Nagoya University) HARIMAYA, Kozo (Ritsumeikan University) TSUBUKU, Masafumi (Daito Bunka University) OZAKI, Yasufumi (Kushiro Public University) AIZAWA, Tomoko (Nihon University) UMINO, Shingo (Kagawa University) ASAI, Yoshihiro (Meiji University) HASHIMOTO, Norihiro (Kobe University)	III-5
20-J-003	January 2020	Industrial Agglomeration and Proliferation of Startup Firms in the Kyushu Region	HAMAGUCHI, Nobuaki (RIETI) OKANO, Hideyuki (Kyushu Economic Research Center) OSAJIMA, Shuzo (Kyushu Economic Federation)	III-1
20-J-004	February 2020	Life and Work Satisfaction and the Ability to Change Behavior—An Empirical Study in Japan	NISHIMURA, Kazuo (RIETI) YAGI, Tadashi (Doshisha University)	VII-6
20-J-005	February 2020	Economic Analysis of Market Expansion Re-pricing: Impact on Government Price Control of Antihypertensive Pharmaceuticals	NISHIKAWA, Kohei (Setsunan University) OHASHI, Hiroshi (RIETI)	V-1
20-J-006	February 2020	Who is Free from Hypertension, Diabetes and Dyslipidemia in the Middle-aged and Elderly Population of Japan? : Verification through a Longitudinal Survey of Middle-aged and Elderly People	SEKIZAWA, Yoichi (RIETI) KONISHI, Yoko (RIETI) IKARI, Hiroshi (RIETI)	V-4
20-J-007	February 2020	Wholesale and Retail Service Price Indices in Japan: Retrospective Measurement from 1955	NOMURA, Koji (RIETI)	V-6
20-J-008	February 2020	How Can Measurement of Benchmark Production Systems be Improved?—The Structure of Secondary Products by Main Activity based on the Survey on Diversification of Sales in Japan	NOMURA, Koji (RIETI)	V-6
20-J-009	February 2020	Japanese Inter-prefectural Input-Output Table: Construction Method and Main Results for 2005	ARAI, Sonoe (RIETI)	VI-4

DP No.	Date	Title	Author(s)	Project No.
20-J-010	February 2020	The Role of Business Groups in Creating New, Innovative Firms: Evidence from Partially Owned Firms in Japan	KIM, Young Gak (Senshu University) NAGAOKA, Sadao (RIETI)	IV-2
20-J-011	February 2020	Regulation of Data Localization Measures in WTO Law	TOJO, Yoshizumi (Rikkyo University)	II-5
20-J-012	February 2020	Foreign Direct Investment and International R&D Collaborations in Japanese Multinational Enterprises	IKEUCHI, Kenta (RIETI)	SP-2
20-J-013	February 2020	Analyzing the Online Advertising Market from the Perspective of Competition Policy	KAWAHAMA, Noboru (RIETI) TAKEDA, Kuninobu (Osaka University)	V-5
20-J-014	February 2020	What Japanese Tourism Amenities are Most Influential in Terms of Demand from Inbound Tourists?	KONISHI, Yoko (RIETI) SAITO, Takashi (METI)	V-4
20-J-015	March 2020	Early Evacuation Promotion Nudges for Heavy Rain Disasters	OHTAKE, Fumio (Osaka University) SAKATA, Kiriko (Hiroshima University) MATSUO, Yuta (Osaka Univerisity)	IX-3
20-J-016	March 2020	Use of AI, Work Style Reform, and Productivity: Evidence from an Individual-Level Survey	MORIKAWA, Masayuki (RIETI)	Multidisciplinary
20-J-017	March 2020	Analysis of the Public Sector Wage Premium in Japan—Evidence from PIAAC Cognitive Skill Data—	ARAKI, Shota (RIETI)	Multidisciplinary
20-J-018	March 2020	Energy Saving and Price Fluctuation of Home Appliances: Hedonic Regression by Panel Data (1996–2019)	KONISHI, Yoko (RIETI) SAITO, Takashi (METI) ISHIKAWA, Toshiki (METI)	V-4

### Research Papers Policy Discussion Papers

Policy Discussion Papers address timely policy issues facing Japan. Although most of the papers are written in Japanese unless otherwise stated, the English abstract of each paper can be found at the following link:

Policy Discussion Papers written in Englishhttps://www.rieti.go.jp/en/publications/act\_pdp.htmlPolicy Discussion Papers written in Japanesehttps://www.rieti.go.jp/en/publications/act\_pdp\_jp.html

Note: Policy Discussion Papers listed below were published from April 2019 to March 2020.

PDP No.	Date	Title	Author(s)	Project No.
19-P-006	April 2019	Monopolar Concentration in Tokyo and Promotion of Urban-to-Rural Migration	KONDO, Keisuke (RIETI)	III-Others
19-P-007	April 2019	Results and discussion of business consciousness survey on business continuity plans (BCP)	NODA, Kentaro (Rikkyo University) HAMAGUCHI, Nobuaki (RIETI) YAMORI, Nobuyoshi (RIETI)	III-1
19-P-008	May 2019	Restructuring Japan's Employment System: Overview	TSURU, Kotaro (RIETI)	VII-1
19-P-009	May 2019	Knowledge-creating Activity of Emerging Countries and Global Networks	IINO, Takashi (Niigata University) URABE, Sumiko (METI) SAITO, Yukiko (RIETI) YAMAUCHI, Isamu (RIETI)	III-6
19-P-010	May 2019	Adoption of Automation Technology and Labor Substitution	ADACHI, Daisuke (Yale University) KAINUMA, Shuhei (The University of Tokyo) KAWAGUCHI, Daiji (The University of Tokyo) SAITO, Yukiko (RIETI)	III-6
19-P-011	June 2019	[WTO Case Review Series No.25] Indonesia—Measures Concerning the Importation of Chicken Meat and Chicken Products (WT/DS484): Interface between Halal Requirement and Free Trade	SEKINE, Takemasa (Nagoya University of Commerce and Business)	II-5
19-P-012	June 2019	Minimum Wages and Productivity: An Overview and Evidence from Japan	MORIKAWA, Masayuki (RIETI)	Multidisciplinary
19-P-013 (English)	August 2019	Results of a survey on standardization activities: Japanese institutions' standardization activities in 2017 (Implementation, knowledge source, organizational structure, and interest to artificial intelligence)	TAMURA, Suguru (RIETI)	Multidisciplinary
19-P-014	August 2019	[WTO Case Review Series No.26] <i>European Union—Measures Affecting Tariff Concessions on Certain Poultry Meat Products</i> (WT/DS492): Characteristics of the WTO Panel's Interpretation of Articles XIII and XXVIII of the GATT	HIRAMI, Kenta (The University of Tokyo)	II-5
19-P-015 (English)	September 2019	Minimum Wages and Productivity: Evidence from Japan	MORIKAWA, Masayuki (RIETI)	Multidisciplinary
19-P-016	October 2019	Global Rulemaking Strategy for Implementing Emerging Innovation: Case of Medical/Healthcare Robot, HAL by Cyberdyne	IKEDA, Yoko (RIETI) IIZUKA, Michiko (National Graduate Institute for Policy Studies)	Multidisciplinary
19-P-017	October 2019	Why do we need economic growth? Macroeconomy and Low Birthrate / Aging Population	KOBAYASHI, Keiichiro (RIETI)	I-Others
19-P-018	October 2019	The transformation of international trade and foreign direct investment in the Fourth Industrial Revolution	TOMIURA, Eiichi (RIETI)	II-Others
19-P-019	October 2019	Prospects for the longevity of urban systems and regional economies under a shrinking population	HAMAGUCHI, Nobuaki (RIETI)	III-Others
19-P-020	October 2019	The Fourth Industrial Revolution and Japan's industrial innovative capability	NAGAOKA, Sadao (RIETI)	IV-Others
19-P-021	October 2019	The Roles of Society 5.0 in Industrial Frontiers	OHASHI, Hiroshi (RIETI)	V-Others
19-P-022	October 2019	The origins of Japan's economic stagnation and necessary policies: An analysis based on the JIP 2018	KIM, Young Gak (Senshu University) KWON, Hyeog Ug (RIETI) FUKAO, Kyoji (RIETI)	VI-Others
19-P-023	October 2019	Does new technology change the way we work? Prospect in the AI era	TSURU, Kotaro (RIETI)	VII-Others
19-P-024	October 2019	Markets and Laws that support the digital era	YANO, Makoto (RIETI)	VIII-Others
19-P-025	October 2019	Analysis of Regional Multiplier of Knowledge Intensive Industries and Creative Jobs based on Economic Base Model: Benefit of Municipal Collaboration	NAKAMURA, Ryohei (RIETI)	III-3
19-P-026	October 2019	Corporate Governance Reform under Abenomics	MIYAJIMA, Hideaki (RIETI) SAITO, Takuji (Keio University)	VIII-1
19-P-027	October 2019	Economic Models in the Aftermath of the Financial Crisis—the Deflationary Equilibrium and the Managed Growth of Debt	KOBAYASHI, Keiichiro (RIETI)	I-1

PDP No.	Date	Title	Author(s)	Project No.
19-P-028 (English)	October 2019	Why has Deflation Continued under Extraordinary Monetary Expansion?	KOBAYASHI, Keiichiro (RIETI)	I-1
19-P-029 (English)	November 2019	Creation of a Blockchain and a New Ecosystem	YANO, Makoto (RIETI) DAI, Chris (Leland Capital / Recika) MASUDA, Kenichi (Anderson Mori & Tomotsune) KISHIMOTO, Yoshio (Organization for Small & Medium Enterprises and Regional Innovation, JAPAN)	VIII-3
19-P-030 (English)	November 2019	Blockchain Business and its Regulation	YANO, Makoto (RIETI) DAI, Chris (Leland Capital / Recika) MASUDA, Kenichi (Anderson Mori & Tomotsune) KISHIMOTO, Yoshio (Organization for Small & Medium Enterprises and Regional Innovation, JAPAN)	VIII-3
19-P-031 (English)	November 2019	Structural Change in Firm Dynamics: From Inter-Firm Network and Geospatial Perspectives	HONG, Gee Hee (International Monetary Fund) OGURA, Yoshiaki (Waseda University) SAITO, Yukiko (RIETI)	III-Others
19-P-032	November 2019	[WTO Case Review Series No.27] <i>United States—Tuna Labeling Case (compliance procedure)</i> (DS381/RW2): Article 2.1 of TBT Agreement and application of the "calibration"	HEIKE, Masahiro (Nishimura & Asahi)	II-5
19-P-033	December 2019	Reducing Administrative Costs from the Standpoint of Businesses	ISHIZAKI, Takashi (RIETI)	Multidisciplinary
19-P-034	December 2019	[WTO Case Review Series No.28] Indonesia—Importation of Horticultural Products, Animals and Animal Products (DS477/478): Limiting effect on importation and justifications regarding integral import measures, relationship between Agriculture Agreement Article 4.2 and GATT Article 11	SHIMIZU, Mari (METI)	II-5
19-P-035	December 2019	Study on the actual status of education, training and skills in schools and workplaces in Japan— evidence from a comprehensive survey by RIETI, "Internet Survey on Intergenerational Education and Training, and Cognitive and Non-cognitive Abilities"	TSURU, Kotaro (RIETI) KUME, Koichi (Toyo University) SANO, Shinpei (Chiba University) YASUI, Kengo (Aoyama Gakuin University)	VII-1
19-P-036	December 2019	Draft for Industrial Promotion in a Super-aged Society	FUJI, Kazuhiko (RIETI)	Multidisciplinary
19-P-037	December 2019	[WTO Case Review Series No.29] <i>Brazil—Certain Measures Concerning Taxation and Charges</i> (DS472, DS497): Scope of the WTO law on Discriminatory Tax Exemption Measures	TOJO, Yoshizumi (Rikkyo University)	II-5
20-P-001	January 2020	[WTO Case Review Series No.30] <i>United States—Measures Affecting Trade in Large Civil Aircraft</i> (Second Complaint): Recourse to Article 21.5 of the DSU by the European Union—Subsidies of which Adverse Effects must be Eliminated	UMEJIMA, Osamu (Takasaki City University of Economics)	II-5
20-P-002	January 2020	Differences between Wholesalers in Services and Trade Characteristics, and the Regional Characteristics of Export Profits: Analyzing the Results of Questionnaires	MORITA, Manabu (Osaka University of Commerce) ISHIKAWA, Yoshifumi (Nanzan University) NAKAMURA, Ryohei (RIETI)	III-3
20-P-003 (English)	January 2020	Structural Changes in Japanese SMEs: Business Dynamism in Aging Society and Inter-Firm Transaction Network	HONG, Gee Hee (International Monetary Fund) ITO, Arata (RIETI) SAITO, Yukiko (RIETI) NGUYEN, Thi-Ngoc Anh (International Monetary Fund)	SP-6
20-P-004	February 2020	[WTO Case Review Series No.31] <i>Russia—Measures concerning Traffic in Transit</i> (DS512): Ambit of National Security Exception in GATT XXI	KAWASE, Tsuyoshi (RIETI)	II-5
20-P-005	February 2020	Current Situation and Issues in Utilization of Highly Skilled Foreign Professionals in Kyushu	MARUYA, Toyojiro (Institute of Developing Economies, JETRO) KUMON, Takashi (Asia University) HAMAGUCHI, Nobuaki (RIETI)	III-1
20-P-006	February 2020	Analyses of Trade Policy Preferences Based on Individual-level Data: Summary of Research Results from a RIETI Survey of 10,000 Individuals	TOMIURA, Eiichi (RIETI) ITO, Banri (RIETI) MUKUNOKI, Hiroshi (Gakushuin University) WAKASUGI, Ryuhei (RIETI)	II-1
20-P-007 (English)	March 2020	Digitalization and New Product Development in Manufacturing SMEs: A Comparative Study of Germany and Japan	MOTOHASHI, Kazuyuki (RIETI) RAMMER, Christian (ZEW)	IV-4
20-P-008	March 2020	Consumers' Reaction to the Consumption Tax Hike and Related Policies: Evidence from a Survey	MORIKAWA, Masayuki (RIETI)	Multidisciplinary
20-P-009	March 2020	Future Forecasts of the Impact of AI on Employment in Japan and Policy Proposals	IWAMOTO, Koichi (RIETI)	V-8
20-P-010	March 2020	[WTO Case Review Series No.32] <i>United States—Conditional Tax Incentives for Large Civil Aircraft</i> (DS487): Development of interpretation related to subsidies contingent upon the use of domestic over imported goods	KAWASHIMA, Fujio (Kobe University)	II-5
20-P-011	March 2020	(Tentative) Proposal of Classification Items for Support Services for the IP Support Desk, which Could Be the Basis of EBPM in Measures Supporting Intellectual Property Utilization by SMEs	KOBAYASHI, Toru (RIETI)	Multidisciplinary

### **Research Papers** The List of Articles Published in Peer-reviewed Academic Journals

Articles based on RIETI fellows' research findings have been published in peer-reviewed academic journals. The following is the list of these articles.

### https://www.rieti.go.jp/en/publications/published/

1	Thorbecke, Willem. "How oil prices affect East and Southeast Asian economies: Evidence from financial markets and implications for energy security." <i>Energy Policy</i> 128 (2019), 628-638. https://www.sciencedirect.com/science/article/pii/S0301421519300436?via%3Dihub RIETI Discussion Paper, 18-E-043 https://www.rieti.go.jp/en/publications/summary/18070001.html
2	Siddiqui, Afzal, Makoto Tanaka, and Yihsu Chen. "Sustainable transmission planning in imperfectly competitive electricity industries: Balancing economic and environmental outcomes." <i>European Journal of Operational Research</i> 275, no.1 (2019), 208-223. https://www.sciencedirect.com/science/article/abs/pii/S0377221718309573 RIETI Discussion Paper, 17-E-024 https://www.rieti.go.jp/en/publications/summary/17030021.html
3	Nguyen, Bao H., and Tatsuyoshi Okimoto. "Asymmetric reactions of the US natural gas market and economic activity." <i>Energy Economics</i> 80 (2019), 86-99. https://www.sciencedirect.com/science/article/pii/S0140988318304973?via%3Dihub RIETI Discussion Paper, 17-E-102 https://www.rieti.go.jp/en/publications/summary/17070013.html
4	Morikawa, Masayuki. "Uncertainty over production forecasts: An empirical analysis using monthly quantitative survey data." <i>Journal of Macroeconomics</i> 60 (2019), 163-179. https://www.sciencedirect.com/science/article/pii/S0164070418300855 RIETI Discussion Paper, 17-E-081 https://www.rieti.go.jp/en/publications/summary/17050022.html
5	Tomohara, Akinori. "Do migrant and business networks promote international royalty receipts? Evidence from the U.S." <i>Applied Economics Letters</i> 26, no. 9 (2019), 759-764. https://www.tandfonline.com/doi/full/10.1080/13504851.2018.1494801 RIETI Discussion Paper, 17-E-006 https://www.rieti.go.jp/en/publications/summary/17010008.html
6	Hsu, Minchung and Tomoaki Yamada. "Population aging, health care and fiscal policy reform: The challenges for Japan." <i>The Scandinavian Journal of Economics</i> 121, no. 2 (2019), 547- 577. http://onlinelibrary.wiley.com/doi/10.1111/sjoe.12280/full RIETI Discussion Paper, 17-E-038 https://www.rieti.go.jp/en/publications/summary/17030047.html
7	Bernard, Andrew, Andreas Moxnes, and Yukiko Saito. "Production networks, geography and firm performance." <i>Journal of Political Economy</i> 127, no. 2 (2019), 639-688. https://www.journals.uchicago.edu/doi/full/10.1086/700764 RIETI Discussion Paper, 16-E-055 https://www.rieti.go.jp/en/publications/summary/16030072.html
8	Hayakawa, Kazunobu, Shujiro Urata, and Taiyo Yoshimi. "Choosing between multiple regional trade agreements: Evidence from Japan's imports." <i>Review of International Economics</i> 27, no. 2 (2019), 578-593. https://onlinelibrary.wiley.com/doi/full/10.1111/roie.12389 RIETI Discussion Paper, 17-E-002 https://www.rieti.go.jp/en/publications/summary/17010003.html
9	Iwasa, Kazumichi, Kazuo Nishimura, and Makoto Yano. "Trade and indeterminacy revisited." <i>International Journal of Economic Theory</i> 15, no. 1 (2019), 37-51. https://onlinelibrary.wiley.com/doi/10.1111/ijet.12205
10	Kuroda, Sachiko, and Isamu Yamamoto. "Why do people overwork at the risk of impairing mental health?" <i>Journal of Happiness Studies</i> 20, no. 5 (2019), 1519-1538. https://link.springer.com/article/10.1007%2Fs10902-018-0008-x RIETI Discussion Paper, 16-E-037 https://www.rieti.go.jp/en/publications/summary/16030044.html
11	Kiyota, Kozo, Toshiyuki Matsuura, and Lionel Nesta. "What's behind the figures? Quantifying the cross-country exporter productivity gap." <i>Economic Inquiry</i> 57, no. 3 (2019), 1256-1271. https://onlinelibrary.wiley.com/doi/full/10.1111/ecin.12769 RIETI Discussion Paper, 16-E-019 https://www.rieti.go.jp/en/publications/summary/16030007.html
12	Arata, Yoshiyuki. "Firm growth and Laplace distribution: The importance of large jumps." <i>Journal of Economic Dynamics and Control</i> 103 (2019), 63-82. https://www.sciencedirect.com/science/article/pii/S0165188919300569 RIETI Discussion Paper, 14-E-033 https://www.rieti.go.jp/en/publications/summary/14060009.html

13	Tomiura, Eiichi, Banri Ito, Hiroshi Mukunoki, and Ryuhei Wakasugi. "Individual characteristics, behavioral biases, and attitudes toward foreign workers: Evidence from a survey in Japan." <i>Japan and the World Economy</i> 50 (2019), 1-13. https://www.sciencedirect.com/science/article/pii/S0922142519300180?via%3Dihub. RIETI Discussion Paper, 17-E-033 https://www.rieti.go.jp/en/publications/summary/17030034.html
14	Nawata, Kazumitsu, Hayato Sugano, and Moriyo Kimura. "An analysis of the effects of blood pressure and antihypertensive drugs on heart disease." <i>Health</i> 11, no. 6 (2019), 792-816. https://www.scirp.org/Journal/PaperInformation.aspx?PaperID=93224.
15	Ikeda, Shin S. "Illiquidity in the Japan electric power exchange." <i>Journal of Commodity Markets</i> 14 (2019), 16-39. https://www.sciencedirect.com/science/article/pii/S2405851317300284. RIETI Discussion Paper, 17-E-122 https://www.rieti.go.jp/en/publications/summary/17110010.html
16	Tomohara, Akinori. "Migrant and business network effects on intellectual property trade: Evidence from Japan." <i>Economic Analysis and Policy</i> 62 (2019), 131-139. https://www.sciencedirect.com/science/article/pii/S0313592618303023 RIETI Discussion Paper, 17-E-006 https://www.rieti.go.jp/en/publications/summary/17010008.html
17	Okubo, Toshihiro, and Eiichi Tomiura. "Regional variations in exporters' productivity premium: Theory and evidence." <i>Review of International Economics</i> 27, no. 3 (2019), 803-821. https://onlinelibrary.wiley.com/doi/full/10.1111/roie.12398 RIETI Discussion Paper, 13-E-005 https://www.rieti.go.jp/en/publications/summary/13010007.html
18	Ihara, Ryusuke. "Heterogeneous labor and agglomeration over generations." <i>Regional Science and Urban Economics</i> 77 (2019), 367-381. https://www.sciencedirect.com/science/article/pii/S0166046218301935 RIETI Discussion Paper, 18-E-038 https://www.rieti.go.jp/en/publications/summary/18060005.html
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## Public Relations Activities

### **Dissemination of Research Results**

The role of policy research institutes does not end with the completion of research. They have an obligation to stimulate policy debate by broadly disseminating the results of their research.

RIETI actively disseminates its research results via publications, website postings, release of PR materials, and events such as symposiums and seminars.

**Publications** 

Website

**PR** Materials

Symposiums

Workshops

**BBL** Seminars

RIETI's research findings are distributed by various publishers.

These publications contribute to society by accumulating and providing information.

### https://www.rieti.go.jp/en/publications/

Publications in the First, Second, and Third Medium-Term Plan periods (FY2001-2005 / FY2006-2010 / FY2011-2015) can be found at:

https://www.rieti.go.jp/en/publications/act\_rb.html (English publications) https://www.rieti.go.jp/en/publications/act\_rb\_jp.html (Japanese publications)

### Publications in the Fourth Medium-Term Plan Period (FY 2016-2020)



Toward a Service-oriented Country: Opening a new frontier of the mature economy

April 2016 / Written by MORIKAWA Masayuki / Nikkei Publishing Inc.



The Japanese Economy and the Energy Supply following the Nuclear Power Accident: Effects of the Great East Japan Earthquake

July 2016 / Written by MANAGI Shunsuke / Minerva Shobo Co., Ltd.



#### The Economy of Intangibles: Intangible Investment and Productivity Improvements in Japan

September 2016 / Edited by MIYAGAWA Tsutomu, ASABA Shigeru, HOSONO Kaoru / University of Tokyo Press



#### Reform of the Japanese Employment System for Revitalizing Workers and the Economy

September 2016 / Written by TSURU Kotaro / Nikkei Publishing Inc.



Corporate Governance and Growth Strategies

February 2017 / Written and edited by MIYAJIMA Hideaki / Toyo Keizai Inc.

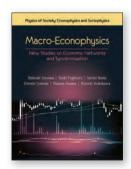


Gender Inequality in the Workplace: Theory and empirical analysis May 2017 / Written by YAMAGUCHI Kazuo / Nikkei Publishing Inc.



Scientific Management of Human Resources with Applications to Japanese Companies: Utilizing data based on causal inference

June 2017 / Written by OWAN Hideo / Nikkei Publishing Inc.



#### Macro-Econophysics: New Studies on Economic Networks and Synchronization

July 2017 / Written by AOYAMA Hideaki, FUJIWARA Yoshi, IKEDA Yuichi, IYETOMI Hiroshi, SOUMA Wataru, YOSHIKAWA Hiroshi / Cambridge University Press



### Revitalization of the Hokuriku Region, Internationalization, and Innovation

September 2017 / Written and edited by MARUYA Toyojiro, HAMAGUCHI Nobuaki, KUMAGAI Satoru, SHIRAMATA Shuji / Nippon Hyoronsha Co., Ltd.



#### Managing Currency Risk: How Japanese Firms Choose Invoicing Currency July 2018 / Written by ITO Takatoshi, KOIBUCHI Satoshi, SATO Kiyotaka, SHIMIZU Junko / Edward Elgar Publishing



Artificial Intelligence and Employment in Japan November 2018 / Written and edited by

IWAMOTO Koichi / Nikkei Publishing Inc.



Next Blockchain: Creation of a new ecosystem for future industries

September 2019 / Written and edited by YANO Makoto, Chris DAI, MASUDA Kenichi, KISHIMOTO Yoshio / Nikkei Publishing Inc.



### SMEs' Attempts to Go IoT

September 2017 / Written and edited by IWAMOTO Koichi, INOUE Yusuke / Nikkan Kogyo Shimbun



#### Regional Productivity Differences in Japan: Industry-Level Studies Based on the R-JIP Database

August 2018 / Edited by TOKUI Joji / University of Tokyo Press



Changing Japan's Civil Society March 2019 / Edited by USHIRO Fusao, SAKAMOTO Haruya / Horitsu Bunka Sha



Toward Restructuring the Employment System: How Can We Change Japan's Work Style?

September 2019 / Written and edited by TSURU Kotaro / Nippon Hyoronsha Co., Ltd.



### Spatial Economics in the Age of Declining Population

February 2018 / Written by FUJITA Masahisa, HAMAGUCHI Nobuaki, KAMEYAMA Yoshihiro / Nikkei Publishing Inc.



#### The Economics of Artificial Intelligence: How Our Lives, Our Work and Our Society Will Change

October 2018 / Written and edited by MANAGI Shunsuke / Minerva Shobo Co., Ltd.



#### "End-of-life Satisfaction" in a Superaged Society with Compassionate Capitalism from Japan

August 2019 / Written by FUJI Kazuhiko / Minerva Shobo Co., Ltd.



The Fourth Industrial Revolution and the Japanese Economy: Sustained Growth under a Transforming Economy and Society February 2020 / Edited by YANO Makoto / University of Tokyo Press



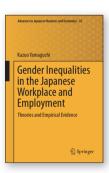
#### Role of Local Financial Institutions for Regional Revitalization

March 2018 / Written and edited by YAMORI Nobuyoshi / Chuokeizai-sha, Inc.



### Productivity: Misconceptions and realities

November 2018 / Written by MORIKAWA Masayuki / Nikkei Publishing Inc.



#### Gender Inequalities in the Japanese Workplace and Employment: Theories and Empirical Evidence

August 2019 / Written by YAMAGUCHI Kazuo / Springer

### **Public Relations** Activities

Published in three languages—Japanese, English, and Chinese—the RIETI website is a key element in our public relations activities. The website makes available to the public a wide range of materials offering in-depth analyses on individual policy issues in various formats such as discussion papers written by fellows, summaries and handouts and other materials from policy symposiums/seminars.

Special efforts have been made to enrich the content of the RIETI website by providing access to the work of individual Research Fellows and study groups. These are quite unique and exclusive to RIETI.

**Website** 

### Some examples are:

As part of the results from the Raising Industrial and Firm Productivity program, the Japan Industrial Productivity Database 2018 (JIP Database 2018) was published in March 2019 to serve as a basic resource for the analysis of Japan's economic growth and changes in its industrial structure. https://www.rieti.go.ip/en/database/JIP2018/index.html

The Japan Economic Policy Uncertainty Index shows economic policy uncertainty (EPU) indices for Japan. The Index is a research outcome from "Policy Uncertainty in Japan," which is an international joint research project between RIETI and the IMF Regional Office for Asia and the Pacific. (Currently only published in Japanese.) https://www.rieti.go.jp/jp/database/policyuncertainty/

The Research on Currency Baskets program started publishing the novel dataset of the industry-specific nominal effective exchange rate (I-NEER) and the industry-specific real effective exchange rate (I-REER) in May 2011. From March 2015, the program began releasing the daily and monthly series of I-NEER and I-REER for nine Asian economies. As of February 2018, the number of countries has increased to 25, also including those in Europe, North America, and Oceania.

#### https://www.rieti.go.jp/users/eeri/en/

The Japanese Study of Aging and Retirement (JSTAR), contains information about a panel survey of middleaged and elderly citizens aged 50 or older that was conducted jointly by RIETI, Hitotsubashi University, and the University of Tokyo.

https://www.rieti.go.jp/en/projects/jstar/

Non-Technical Summaries are brief summaries of discussion papers which include policy proposals based on the analysis of the papers and the subsequent policy implications.

### https://www.rieti.go.jp/en/publications/nts/

The EBPM Report section features reports on evidence-based policy making (EBPM). As interest in EBPM increases globally, RIETI fellows report on various issues from academic and policy perspectives.

RIETI is partnering with the Centre for Economic Policy Research (CEPR), a leading European research network, to make its research findings more accessible to an international audience, and articles by RIETI fellows now appear on CEPR's policy portal site, VoxEU.org. In the same manner, VoxEU.org articles are published on RIETI's website to raise awareness of key developments in policy discourse overseas. https://www.rieti.go.jp/en/columns/voxeu.html

The Column section features articles written by RIETI fellows on policy-related matters and proposals. https://www.rieti.go.jp/en/columns/

The Perspectives from Around the World section features the opinions of some of the world's leading researchers regarding various issues including economic policy, international affairs, and gender issues. https://www.rieti.go.jp/en/special/p a w/

China in Transition, by Consulting Fellow Chi Hung Kwan, is a popular feature of the website, as it shines the spotlight on five areas related to China: economic reform in China, Chinese economics, Chinese industries and enterprises, China in the world, and Sino-Japanese relations. East Asian Economic Strategies by Visiting Scholar Shiro Armstrong is another popular feature, and it investigates and analyzes issues concerning international trade, commerce and economics in East Asia including Japan, the Association of Southeast Asian Nations (ASEAN) and Australia.

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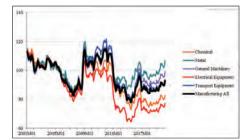


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### **PR Materials**

To promote the wide dissemination of research results and subsequent contributions that invigorate policy debate, a variety of PR materials are available in print and downloadable from our website.

### Materials for dissemination of research results

### **RIETI Highlight**

### https://www.rieti.go.jp/en/about/pr/archive.html

*RIETI Highlight* is a quarterly public relations magazine that keeps readers up-to-date on the activities of RIETI. Each edition includes brief reports on symposiums, workshops and seminars, reviews of new publications, and columns written by our fellows. A column titled "Research Digest," which introduces recently published discussion papers through interviews with their authors, explores the motivation underlying their research in an easy-to-understand manner that has been well received by readers.

Volume: approx. 50 pages
 Languages: Japanese / English (only for Special Issues)



### Materials about RIETI

### **Brochures**

https://www.rieti.go.jp/en/about/pr/brochure.html

Brochures introduce general information on RIETI including RIETI's mission, research themes and processes, an access map, and organization charts.

Languages: Japanese, English, Chinese





### https://www.rieti.go.jp/en/about/pr/index\_report.html

The Annual Report is a concise summary of the entirety of RIETI's activity in each fiscal year. It reports on topics such as research projects, fellows' activities, and PR activities.

- Volume: approx. 80 pages
- Languages: Japanese, English, Chinese (Chinese only available in PDF)



Note: Titles and affiliations of participants are current as of the day of the events. Lists of Speakers/Panelists (Commentators)/ Moderators are in order of appearance.

RIETI Special BBL Seminar

### **Carbon Recycling Based on the Photocatalysis Technology**

https://www.rieti.go.jp/en/events/19041101/info.html

Date	April 11, 2019
Venue	RIETI's Seminar Room
Host	RIETI
Participants	103

#### Speaker / Moderator

FUJISHIMA Akira (Distinguished Professor, Director of Photocatalysis International Research Center, Tokyo University of Science)

WAKUDA Hajime (Director, Policy Planning Division, Natural Resources and Fuel Department, Agency for Natural Resources and Energy, METI)

#### RIETI Open BBL Seminar

### 2019 White Paper on Small, Medium, and Micro-sized Enterprises in Japan: Towards the success of SMEs and micro businesses in the Reiwa era

https://www.rieti.go.jp/en/events/19052301/info.html

Date	May 23, 2019
Venue	RIETI's Seminar Room
Host	RIETI
Participants	82

#### Speaker / Moderator

UNO Yuya (CF, RIETI / Former Deputy Director, Research Office, Business Environment Department, Small and Medium Enterprise Agency, METI)

SEKIGUCHI Yoichi (SF and RC (Research), RIETI)

RIETI Open BBL Seminar

### Outline of the 2019 White Paper on Manufacturing Industries (Monodzukuri): Strategies for strengthening our manufacturing industries' competitiveness in the changing environment

https://www.rieti.go.jp/en/events/19062001/info.html

Date	June 20, 2019
Venue	RIETI's Seminar Room
Host	RIETI
Participants	86

#### Speaker / Moderator

MIZUNO Masato (Director, Manufacturing Industries Policy Office, Manufacturing Industries Bureau, METI)

HASHIMOTO Yuki (F, RIETI)

#### RIETI T20-G20 Symposium

### Free Trade and Data Free Flow with Trust (DFFT): Challenges and strategies for Japan

#### https://www.rieti.go.jp/en/events/19070501/info.html

Date	July 5, 2019
Venue	Nadao Hall, Japan National Council of Social Welfare (Zenshakyo)
Host	RIETI
Participants	198

#### Programs

**Opening Remarks** 

Presentation 1: "The G20 Ministerial Meeting on Trade and Digital Economy and G20 Osaka Summit"

Presentation 2: "Creating a Policy Structure to Support the Free Flow of Data: Policy recommendation from T20"

Panel Discussion "Japan's Possible Strategies for Surviving the Era of Digital Economy & Trade Tensions"

#### Speakers / Panelists / Moderator

NAKAJIMA Atsushi (Chairman, RIETI)

MATSUO Takehiko (Director-General for Trade Policy, METI)

KIMURA Fukunari (Lead Co-chair, Task Force of "Trade, Investment and Globalization" T20 Japan / CF, RIETI / Professor, Faculty of Economics, Keio University)

YOKOZAWA Makoto (Senior Consultant, Nomura Research Institute, Ltd. / Visiting Professor, the Graduate School of Informatics, Kyoto University)

SUZUKI Hideo (Managing Executive Officer, Nippon Steel Corporation)

ONODERA Osamu (Deputy Director-General for Trade Policy, Trade Policy Bureau, METI)

SEKIGUCHI Hiroyuki (Senior Commentator, NHK)

\*T20 Japan Associated Event



#### The 21st RIETI Highlight Seminar

### Thinking About Widening Gaps in the Reiwa Era— What will happen to corporate governance and wage gaps?

https://www.rieti.go.jp/en/events/19071801/info.html

Date	July 18, 2019
Venue	RIETI's Seminar Room
Host	RIETI
Participants	74

#### Speakers / Panelists / Moderator

KAWAGUCHI Daiji (Professor, Graduate School of Public Policy, The University of Tokyo)

MIYAJIMA Hideaki (FF, RIETI / Executive Vice President for Financial Affairs, Waseda University / Professor, Graduate School of Commerce, Waseda University / Adviser, Waseda Institute for Advanced Study)

NAKAJIMA Atsushi (Chairman, RIETI)



#### RIETI Open BBL Seminar

### White Paper on International Economy and Trade 2019: The current global economy and challenges to free trade

https://www.rieti.go.jp/en/events/19072501/info.html

Date	July 25, 2019
Venue	RIETI's Seminar Room
Host	RIETI
Participants	96

#### Speaker / Moderator

OTA Mineko (Director, APEC Office and Former Director, Policy Planning and Research Office, Trade Policy Bureau, METI)

ZHANG Hongyong (F, RIETI)	ZHANG	Hongyong	(F,	RIETI)
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#### METI-RIETI Policy Symposium

### Corporate Governance for Global Companies: Toward an increase in corporate value

https://www.rieti.go.jp/en/events/19090201/info.html

Date	September 2, 2019
Venue	lino Hall and Conference Center
Hosts	METI; RIETI
Participants	414

#### Programs

Opening Remarks

Presentation 1

Presentation 2

Part 1	Panel Discussion Q&A	
Part 2	Panel Discussion	

Q&A

#### Speakers / Panelists / Moderator

NAKAJIMA Atsushi (Chairman, RIETI)

NIIHARA Hiroaki (Director-General, Economic and Industrial Policy Bureau, METI)

MIYAJIMA Hideaki (FF, RIETI / Executive Vice President for Financial Affairs, Waseda University / Professor, Graduate School of Commerce, Waseda University / Adviser, Waseda Institute for Advanced Study)

UEDA Ryoko (Senior Research Fellow, J-IRIS Research)

KOGUCHI Masanori (Senior Executive Vice President, Chief Financial Officer, Mitsubishi Heavy Industries, Ltd.)

TOYAMA Kazuhiko (Managing Partner, Industrial Growth Platform, Inc.)

NAKAMURA Toyoaki (Board Director, Hitachi, Ltd.)

SAWAGUCHI Minoru (Partner, Mori Hamada & Matsumoto)

FUJIWARA Ken (Director of the Board, Managing Corporate Executive Officer, Chief Compliance Officer, Mitsubishi Chemical Holdings)

MATSUDA Chieko (Professor, Tokyo Metropolitan University Graduate School of Management / Professor, Faculty of Economics and Business Administration, Tokyo Metropolitan University)

SAKAMOTO Riwa (Director, Corporate System Division, Economic and Industrial Policy Bureau, METI)



#### **RIETI** Open Seminar

### American Views on Trade, the Economy and the Upcoming U.S. Election in Year Three of the Trump Administration

https://www.rieti.go.jp/en/events/19091101/info.html

Date	September 11, 2019
Venue	RIETI's Seminar Room
Host	RIETI
Participants	55

#### Speaker / Moderator

Bruce STOKES (Non-resident Fellow, German Marshall Fund of the United States / Associate, Chatham House)

Willem THORBECKE (SF, RIETI)

#### **RIETI** Policy Seminar

### Entrepreneurship, Innovation, and Finance: New growth avenues in developed economies

https://www.rieti.go.jp/en/events/19092601/info.html

Date	September 26, 2019
Venue	RIETI's Seminar Room
Host	RIETI
Co-host	JSPS KAKENHI Grant Number 16H02027 "Research on Startup Finance to Support Regional Revitalization"
Participants	69

#### Programs

**Opening Remarks** Keynote Speech: Small Business Finance

Special Session: Crowdfunding

Panel Discussion

**Closing Remarks** 

### Speakers / Panelists / Moderators

NAKAJIMA Atsushi (Chairman, RIETI)

Gregory F. UDELL (Professor of Finance, Kelly School of Business, Indiana University)

UESUGI lichiro (Professor, Institute of Economic Research, Hitotsubashi University)

Armin SCHWIENBACHER (Professor, SKEMA Business School)

Fabio BERTONI (Professor, EMLyon Business School)

MATSUO Junsuke (Professor, Faculty of Business Administration, Momoyama Gakuin University)

ONO Arito (Professor, Faculty of Commerce, Chuo University)

HONJO Yuji (FF, RIETI / Professor, Faculty of Commerce, Chuo University)



RIETI Open BBL Seminar

### The New Platform for Japan-Taiwan Relations and Advanced Technology Exchange

https://www.rieti.go.jp/en/events/19093001/info.html

Date	September 30, 2019
Venue	RIETI's Seminar Room
Host	RIETI
Participants	51

#### Speaker / Moderator

LI Shih-Hui (Professor of Program in Japan Studies, College of International Affairs, National Chengchi University)

ANDO Haruhiko (Vice Chairman, RIETI)

#### RIETI Blockchain Symposium

### Next Blockchain: Creation of a new ecosystem for future industries

#### https://www.rieti.go.jp/en/events/19100701/info.html

	0 //	
Date	October 7, 2019	
Venue	NIKKEI Hall	
Host	RIETI	
Participants	332	
Programs		
Opening Remarks		
Special Remarks		
Keynote Speeches		
Panel Discussion:	"IoT and Data Marketplace"	
Wrap-up		
Speakers / Pane	elists / Moderator	
NAKAJIMA Atsush	i (Chairman, RIETI)	
HIRAI Takuya (Forr	ner Minister in charge of IT, Science and Technology Policy)	
NISHIYAMA Keita (CF, RIETI / Director-General, Commerce and Information Policy Bureau, METI)		
HIRANO (Pina) Yoichiro (Chairman, Blockchain Collaborative Consortium)		
YANO Makoto (Pre	sident and CRO, RIETI)	
Fabian VOGELSTE Author of ERC 20)	LLER (Founder and Chief Architect at LUKSO / Ethereum Developer and	

Steven PU (Founder and CEO, Taraxa.io)

KISHIMOTO Yoshio (Senior Director General, Organization for Small & Medium Enterprises and Regional Innovation, Japan)

KATO Sei (Group Manager, Advanced Electronics Development Department No.1, Connected Advanced Development Division, Connected Company, TOYOTA Motor Corporation)

MATSUSHIMA Michiaki (Editor in Chief, WIRED JAPAN)

William METCALFE (Co-founder, Curvegrid)

Chris DAI (CEO, LONGHASH Japan / CEO, RECIKA)

KANO Yuzo (Representative Director, Japan Blockchain Association)



# The G20 and the World Economy: Performance and prospects

https://www.rieti.go.jp/en/events/19101701/info.html

Date	October 17, 2019
Venue	RIETI's Seminar Room
Host	RIETI
Participants	81

### Speaker / Moderator

Dale W. JORGENSON (Samuel W. Morris University Professor, Harvard University)

MORIKAWA Masayuki (Vice President, RIETI)

# International Seminar on "Governance Reforms from Comparative Perspectives"

https://www.rieti.go.jp/en/events/19110601/info.html

Dates	November 6-7, 2019
Venues	Blendipity Hall, Waseda University Nihombashi Campus (November 6), Conference Center, Otemachi Financial City (November 7)
Host	Waseda Institute for Advanced Study (WIAS)
Co-hosts	Waseda Business School (WBS); Development Bank of Japan; Research Institute of Capital Formation (DBJ- RICF); RIETI
Participants	178

ADB-RIETI Special BBL Seminar

### ADB Asian Economic Integration Report 2019/2020— Demographic change, productivity, and the role of technology

https://www.rieti.go.jp/en/events/19111301/info.html

Date	November 13, 2019
Venue	RIETI's Seminar Room
Host	RIETI
Co-host	Asian Development Bank (ADB)
Participants	84

### Speakers / Commentators / Moderator

SAWADA Yasuyuki (Chief Economist and Director General for Economic Research and Regional Cooperation Department, ADB)

KIKKAWA Aiko (Economic Research and Regional Cooperation Department, ADB)

OHNO Izumi (Director, JICA Research Institute)

KAWAGUCHI Daiji (Professor, Graduate School of Economics, The University of Tokyo)

FUJISAWA Hideaki (Director, Asia and Pacific Division, Trade Policy Bureau, METI)

RIETI-ANU Symposium

### Asian Integration and the Global Economy: Economics of geopolitics

https://www.rieti.go.jp/en/events/19112101/info.html

Date	November 21, 2019
Venue	RIETI's Seminar Room
Hosts	RIETI; Australian National University (ANU)
Participants	59

### Programs

Opening Remarks

Presentation: "Getting Strategic Policy Right"

Panel Discussion

#### Speakers / Panelists / Moderator

#### NAKAJIMA Atsushi (Chairman, RIETI)

Gordon DE BROUWER (Honorary Professor, ANU / Former Secretary, Department of the Environment and Energy, and former Associate Secretary of the Department of the Prime Minister and Cabinet and G20 Sherpa / Panel Member of the Independent Review of the Australian Public Service)

Shiro ARMSTRONG (VS, RIETI / Director, Australia-Japan Research Centre, ANU)

Christopher FINDLAY (Honorary Professor, Crawford School of Public Policy, ANU)

HOSAKA Shin (Director-General, Trade and Economic Cooperation Bureau, METI)

URATA Shujiro (FF, RIETI / Professor of Economics, Graduate School of Asia-Pacific Studies, Waseda University)

OKADA Kohei (Deputy Director-General for Trade and Economic Cooperation Bureau, METI)

IIMURA Akiko (Professor and Head, Research Strategy Department, University Research Administration Center, Tokyo University of Science)



### The 22nd RIETI Highlight Seminar

### Productivity and Long-term Stagnation—What should economic policy do in the future?

https://www.rieti.go.jp/en/events/19112701/info.html

Venue RIETI's Seminar Room	
Host RIETI	
Participants 71	

### Speakers / Panelists / Moderator

MORIKAWA Masayuki (Vice President, RIETI)
KOBAYASHI Keiichiro (PD / FF, RIETI)
NAKAJIMA Atsushi (Chairman, RIETI)



RIETI Special BBL Seminar

## Can the WTO Survive? Rule of law in the multilateral trading system and Japan's role

### https://www.rieti.go.jp/en/events/19120901/info.html

Date	December 9, 2019
Venue	RIETI's Seminar Room
Host	RIETI
Participants	82

### Speakers / Panelists / Moderator

OTABE Yoichi (Former Ambassador Extraordinary and Plenipotentiary and Permanent Representative of Japan to the International Organizations in Geneva / Former Senior Deputy Minister for Foreign Affairs)

KAWASE Tsuyoshi (FF, RIETI / Professor, Faculty of Law, Sophia University)

KURODA Junichiro (Director-General, Multilateral Trade System Department, Trade Policy Bureau, METI)

RIETI Open BBL Seminar

### Beyond TICAD7—Opportunities in powering African industrial development through UNIDO Energy (DOE)

https://www.rieti.go.jp/en/events/19121901/info.html

Date	December 19, 2019
Venue	RIETI's Seminar Room
Host	RIETI
Participants	73

#### Speaker / Commentator / Moderator

OISHI Hiroshi (Chief Technical Advisor, Department of Energy (DOE), United Nations Industrial Development Organization (UNIDO))

ADACHI Mai (Deputy Director, Technical Cooperation Division, Trade and Economic Cooperation Bureau, METI)

ANDO Haruhiko (Vice Chairman, RIETI)

### RIETI EBPM Symposium

### To Advance Evidence-Based Policy Making

https://www.rieti.go.jp/en/events/19122501/info.html

Date	December 25, 2019	
Venue	lino Hall and Conference Center	
Host	RIETI	
Participants	221	
Programs		
Opening Remarks		
Introduction		
Session 1		
Prese	entation 1	
Presentation 2		
Q&A	Q&A	
Session 2		
Prese	entation 3	
Presentation 4		
Q&A		
Session 3		
Prese	entation 5	
Presentation 6		
Q&A		
Session 4		
Pane	Discussion	
Speakers / Pan	elists / Moderators	

#### \_\_\_\_\_

NAKAJIMA Atsushi (Chairman, RIETI)

YAMAGUCHI Kazuo (VF, RIETI / Ralph Lewis Professor of Sociology, The University of Chicago)

ITO Koichiro (F (Specially Appointed), RIETI / Associate Professor, Harris School of Public Policy, The University of Chicago)

KOBAYASHI Yohei (CF, RIETI / Chief Analyst, Mitsubishi UFJ Research & Consulting Co., Ltd.)

SEKIZAWA Yoichi (SF, RIETI)

OHTAKE Fumio (Professor, Graduate School of Economics, Osaka University)

NARITA Yusuke (VF, RIETI / Assistant Professor, Yale University / Visiting Assistant Professor, Stanford University)

NAKAMURO Makiko (Professor, Faculty of Policy Management and Graduate School of Media and Governance, Keio University)

UCHIYAMA Yu (Professor, Graduate School of Arts and Sciences, The University of Tokyo)

MORIKAWA Masayuki (Vice President, RIETI)



### RIETI Open BBL Seminar

### **Managing Currency Risk**

https://www.rieti.go.jp/en/events/19122601/info.html

Date	December 26, 2019
Venue	RIETI's Seminar Room
Host	RIETI
Participants	66

### Speakers / Commentator / Moderator

ITO Takatoshi (Professor, School of International and Public Affairs, Columbia University / Professor, National Graduate Institute for Policy Studies)

SATO Kiyotaka (Professor, Department of Economics, Graduate School of International Social Sciences, Yokohama National University)

SHIMIZU Junko (Professor, Faculty of Economics, Gakushuin University)

KOIBUCHI Satoshi (Professor, Faculty of Commerce, Chuo University)

INOUE Seiichiro (SF, RIETI)

RIETI Open BBL Seminar

### New Development of "Business Support Library" Useful for Regional Revitalization

https://www.rieti.go.jp/en/events/20011501/info.html

Date	January 15, 2020
Venue	RIETI's Seminar Room
Host	RIETI
Participants	61

### Speakers / Moderator

YONO Momoko (Collection Building, Japan Business Library Association)

TAKEUCHI Toshiaki (President, Japan Business Library Association)

ANDO Haruhiko (Vice Chairman, RIETI)

#### **RIETI Open BBL Seminar**

### New Renewable Energy Technology Development through Industry-Government-Academia Collaboration: To compete with the world

### https://www.rieti.go.jp/en/events/20012901/info.html

Date	January 29, 2020
Venue	RIETI's Seminar Room
Host	RIETI
Participants	79

### Speaker / Commentator / Moderator

SEGAWA Hiroshi (Professor, Graduate School of Arts and Sciences, The University of Tokyo)

HIGASHINO Yasuaki (Assistant General Manager, Marubeni Corporation)

ANDO Haruhiko (Vice Chairman, RIETI)

### RIETI Open BBL Seminar

### Current Status, Prospects and Challenges of Impact Investing in Japan

https://www.rieti.go.jp/en/events/20020601/info.html

Date	February 6, 2020
Venue	RIETI's Seminar Room
Host	RIETI
Participants	94

### Speakers / Moderator

ODA Satoshi (Knowledge Development Officer, Japan Social Innovation and Investment Foundation)

UENO Sota (Co-CEO, Human Alba)

SABURI Masataka (Director, PR Strategy, RIETI)

RIETI Open BBL Seminar

### Critical Ideas in Confronting the Revolutionary Era of 5G & DX Technologies

### https://www.rieti.go.jp/en/events/20021201/info.html

Date	February 12, 2020
Venue	RIETI's Seminar Room
Host	RIETI
Participants	146

### Speaker / Moderator

MORIKAWA Hiroyuki (Professor, Graduate School of Engineering, The University of Tokyo)	
ANDO Haruhiko (Vice Chairman, RIETI)	

RIETI Policy Symposium

### The Fourth Industrial Revolution and Japan's Economic Outlook

https://www.rieti.go.jp/en/events/20022601/info.html

Date	February 26, 2020		
Venue	lino Hall and Conference Center		
Host	RIETI		
Programs			
Opening Remarks	Opening Remarks		
Special Remarks (Video Message)			
Guest Presentation			
Presentation			
Session 1			
Presentation 1			
Presentation 2			
Presentation 3			
Prese	Presentation 4		
Discu	Discussion, Q&A		

	Presentation 1
	Presentation 2
	Presentation 3
	Presentation 4
	Discussion, Q&A
Sp	eakers / Panelists / Moderator
NA	KAJIMA Atsushi (Chairman, RIETI)
KA	JIYAMA Hiroshi (Minister of Economy, Trade and Industry)
NII	HARA Hiroaki (Director-General, Economic and Industrial Policy Bureau, METI)
YA	NO Makoto (President and CRO, RIETI)
NA	GAOKA Sadao (PD, RIETI / Professor, Tokyo Keizai University)
	IASHI Hiroshi (PD, RIETI / Vice Dean, Professor of Economics, Graduate School of Public licy, The University of Tokyo)
	URU Kotaro (PD, RIETI / Professor, Graduate School of Business & Commerce, Keio iversity)
MC	RIKAWA Masayuki (Vice President, RIETI)
Eco	NISHI Yoko (SF, RIETI / Specially Appointed Professor (Full-time), Graduate School of onomics, Osaka University / Specially Appointed Professor (Research), Graduate School of onomics and Management, Tohoku University)
	KAO Kyoji (PD, RIETI / Professor, Institute of Economic Research, Hitotsubashi University , esident, Institute of Developing Economies, Japan External Trade Organization (IDE-JETRO)
	BAYASHI Keiichiro (PD, RIETI / Research Director, The Tokyo Foundation for Policy search)
TO	MIURA Eiichi (PD, RIETI / Professor, Faculty of Economics, Hitotsubashi University)
	MAGUCHI Nobuaki (PD, RIETI / Professor, Research Institute for Economics and Business ministration, Kobe University)
	*The event was held without an audience due to the spread of COVID-

### RIETI Special BBL Seminar

# Considering the Shape of This Country: Reflection and discussions on parliamentary democracy in Japan and the UK

### https://www.rieti.go.jp/en/events/20031901/info.html

Date	March 19, 2020
Venue	RIETI's Seminar Room
Host	RIETI

### Speaker / Moderator

TSURUOKA Koji (Former Ambassador of Japan to the United Kingdom)

NAKAJIMA Atsushi (Chairman, RIETI)

\*The event was held without an audience due to the spread of COVID-19.

### CEPR-RIETI Webinar

# Economics in the Time of COVID-19: The economic impact on Asia

https://www.rieti.go.jp/en/events/20032401/info.html

Date	March 24, 2020
	,
Hosts	RIETI; Centre for Economic Policy Research (CEPR)
Programs	
Opening Remark	S
Presentation $\ll$ (	CEPR ≫
Presentaion $\ll$ R	IETI »
Eas	Asian Value Chains and the Coronavirus
Globalization in Reverse / Middle East Crisis	
Rising Policy Uncertainty in Response to the Coronavirus Outbreak	
Observing the Impact of COVID-19 on Consumer Behavior in Japan Data	
Tele	working and Productivity: How to mitigate the impact of Coronavirus?
	gation or Suppression? Interpreting Boris Johnson's changing decision on /ID-19 from behavioral economics perspective
Concluding Con	nments
Speakers / Pa	nelists / Moderator
NAKAJIMA Atsushi (Chairman, RIETI)	
Richard BALDWIN (Professor of International Economics, Graduate Institute, Geneva)	
Beatrice WEDER di MAURO (President, CEPR / Professor of International Economics, Graduate Institute, Geneva / Distinguished Fellow, Emerging Markets Institute, INSEAD)	
Willem THORBECKE (SF, RIETI)	
FUJI Kazuhiko (SF, RIETI)	
TO Arata (F, RIETI)	
KONISHI Yoko (	SF, RIETI)
MORIKAWA Ma	sayuki (Vice President, RIETI)
SEKIZAWA Yoic	ni (CE DIETI)

Note: Titles and affiliations of participants are current as of the day of the events. Lists of Speakers/Panelists (Commentators)/ Moderators are in order of appearance.

T20 Japan Associated Event

### T20-G20 Roundtable Discussion on "Digital Trade, WTO Reform, and Trade and Investment for Sustainable and Inclusive Growth"

https://www.rieti.go.jp/en/events/19040901/info.html

Date	April 9, 2019
Venue	Toranomon Hills Forum, Hall A
Hosts	RIETI; German Development Institute (DIE)

#### Programs

**Opening Remarks** 

Special Remarks

Keynote Speech

Introductory Speech: T20 Policy Briefs

Session 1: Digital Trade

Breakout Sessions

Session 2-1 WTO Reform

Session 2-2 Trade and Investment for Sustainable and Inclusive Growth

Session 3: Wrap-up Discussion

**Closing Remarks** 

### Speakers / Panelists / Moderators

NAKAJIMA Atsushi (Chairman, RIETI)

MATSUO Takehiko (Director-General for Trade Policy, METI)

TSUKADA Tamaki (Deputy Director-General / Deputy Assistant Minister: Economic Affairs Bureau, Ministry of Foreign Affairs)

Mari Elka PANGESTU (Former Minister of Trade, Republic of Indonesia / Professor, Faculty of Economics and Business, University of Indonesia)

KIMURA Fukunari (CF, RIETI / Professor, Faculty of Economics, Keio University)

NAKATOMI Michitaka (CF, RIETI)

Joshua P. MELTZER (Senior Fellow, Brookings Institution)

Mona Farid BADRAN (Associate Professor, Economics Department, Cairo University)

Kimberley BOTWRIGHT (Community Lead, Global Trade and Investment SI, World Economic Forum (WEF))

Edwina STEVENS (Assistant Secretary, Department of Foreign Affairs and Trade, Australia)

Jeanette LIM (Director, Ministry of Trade and Industry, Singapore)

Shiro ARMSTRONG (VS, RIETI / Director, Australia-Japan Research Centre, ANU)

NAKAGAWA Junji (CF, RIETI / Chuo Gakuin University)

Uri DADUSH (Senior Fellow, Policy Center for the New South / Non-Resident Scholar, Bruegel)

Rajat KATHURIA (Director and Chief Executive, Indian Council for Research on International Economic Relations (ICRIER))

John HANCOCK (Counsellor, Policy Development, World Trade Organization (WTO))

Carlos GIMENO VERDEJO (Senior Policy Advisor, G20, G7, OECD and WTO accessions, European Commission)

Kendal HEMBROFF (Global Affairs, Canada)

Axel BERGER (Senior Researcher, German Development Institute (DIE))

TODO Yasuyuki (FF, RIETI / Professor, Faculty of Political Science and Economics, Waseda University)

Julia NIELSON (Deputy Director, Trade and Agriculture, Organisation for Economic Cooperation and Development (OECD))

Matthew STEPHENSON (Policy and Community Lead, International Trade and Investment, WEF)

INOMATA Satoshi (Chief Senior Researcher, Institute of Developing Economies, Japan External Trade Organization (JETRO))

Chris BARTON (Director, Department of International Trade, UK)

Jose Luis KAISER (Director General for Trade Policy and Competitiveness, Spain)

Dammu RAVI (Department of Commerce, Ministry of Commerce and Industry, India)

HATTORI Takashi (CF, RIETI / Associate Professor, Kyoto University)



#### **RIETI** International Seminar

### Frontiers of Behavioural Insights

https://www.rieti.go.jp/en/events/19052201/info.html

Date	May 22, 2019	
Venue	RIETI's Seminar Room	
Host	RIETI	
Speakers / Panelists / Moderators		
Dr. David HALPERN (CEO, The Behavioural Insights Team)		

OSHIO Takashi (FF, RIETI / Professor, Hitotsubashi University)

### **RIETI 2019** International Workshop on the Development of the Nursing Care Industry in China and Japan

Date	May 24, 2019	
Venue	RIETI's Seminar Room	
Programs		
Opening Rem	arks	
Session 1		
	The Impact of Population Aging on China's Economic Growth"	
	Regression Discontinuity Designs with a Continuous Treatment"	
	Labor Productivity in the Japanese Home Help Industry: Evidence from stablishment-level data"	
Session 2		
	The Current Situation and Challenges of the Elderly Services Reform in Shanghai"	
	"The Effect of Macroeconomic Conditions on the Supply of Workers and Ma in Long-term Care Facilities in Japan"	
	Income Stratification of Internal Migrants among Occupational Classes in China"	
Session 3: Co	onjoint Survey Session	
	Estimating Family Preference for Home Elderly-care Services: Evidence from a arge-scale conjoint survey experiment in Japan"	
	Public Opinion for Mixed Elderly Care: Evidence from a large-scale conjoint survey experiment in Japan"	

Closing Remarks

Speakers / Panelists / Moderators

YANO Makoto (President and CRO, RIETI)

YIN Ting (RIETI)

XU Zhaoyuan (Industrial Economic Research Department, Development Research Center of the State Council)

OSHIO Takashi (RIETI / Institute of Economic Research, Hitotsubashi University)

DONG Yingying (University of California Irvine)

YANAGI Takahide (Graduate School of Economics, Faculty of Economics, Kyoto University)

SUZUKI Wataru (Faculty of Economics, Gakushuin University)

MORIKAWA Masayuki (Vice President, RIETI)

KONDO Hiroki (Faculty of Economics, Sophia University)

ZHONG Renyao (School of Public Administration, East China Normal University)

TAMAI Kingo (Faculty of Economics, Aichi Gakuin University)

HANAOKA Chie (Department of Policy Studies, Toyo University)

IBUKA Yoko (Faculty of Economics, Keio University)

OKUBO Shoki (Institute of Social Science, The University of Tokyo)

WU Zheren (Department of International Economics, Kindai University)

ZHOU Yanfei (The Japan Institute for Labour Policy and Training (JILPT))

KAWATA Keisuke (Institute of Social Science, The University of Tokyo)

YOSHIDA Yuichiro (Graduate School of Humanities and Social Sciences, Hiroshima University)

ZHANG Junchao (The Institute of Statistical Mathematics, Research Organization of Information and Systems)

NAKAJIMA Atsushi (Chairman, RIETI)



### Tokyo Workshop on Spatial Economics 2019

### Frontiers in Urban Economics and Trade

https://www.rieti.go.jp/en/events/19060401/info.html

Date	June 4, 2019		
Venue	RIETI's Seminar Room		
Host	RIETI		
Programs			
Opening	Opening		
Session I			
The Ef	fective Density Elasticity of Productivity for Movers and Stayers		
The S	hrinking Advantage of Market Potential		
Session II			
Highw	vays, Market Access, and Spatial Sorting		
Urban	Urban Interactions		
Speakers / Pane	elists / Moderators		
YANO Makoto (RIETI)			
TABUCHI Takatoshi (The University of Tokyo)			
Gabriel AHLFELDT (London School of Economics)			
FUJISHIMA Shota (Tokyo University of Science)			
Klaus DESMET (Southern Methodist University)			
NAKAJIMA Kentaro (Hitotsubashi University)			
TAKAHASHI Takaaki (The University of Tokyo)			
Frederic ROBERT-NICOUD (University of Geneva)			
SATO Yasuhiro (Th	SATO Yasuhiro (The University of Tokyo)		
Yves ZENOU (Mor	Yves ZENOU (Monash University)		
ITOH Ryo (Tohoku	ITOH Ryo (Tohoku University)		

International Workshop

### **Frontiers in Research on Offshoring**

https://www.rieti.go.jp/en/events/19080201/info.html

Date August 2, 2019		August 2, 2019	
Venue		RIETI's Seminar Room	
Hosts		RIETI / Hitotsubashi Institute for Advanced Study	
Programs			
Opening Re	emarks		
Session 1			
	"Intellectual Property Related Preferential Trade Agreements and the Composition of Trade"		
	"Tax Havens and Cross-border Licensing"		
Session 2			
	"Trade Agreements when Profits Matter"		
	"Individual Preferences on Trade Liberalization: Evidence from a Japanese household survey"		
Session 3			
	"The Quantitative Effects of Trade Policy on Industrial and Labor Location"		
	"Processing Trade, Productivity and Prices: Evidence from a Chinese production survey"		
	"CATs and DOGs"		

Clos	ing Remarks			
Spe	akers / Panelists / Moderators			
YAN	0 Makoto (President and CRO, RIETI)			
ISHI	KAWA Jota (RIETI / Hitotsubashi University)			
TAKI	ECHI Kazutaka (Hosei University)			
Keith	MASKUS (University of Colorado)			
Lin 1	Lin TIAN (INSEAD)			
KASAHARA Hiroyuki (University of British Columbia / Hitotsubashi University)				
MUKUNOKI Hiroshi (Gakushuin University)				
Monika MRAZOVA (University of Geneva)				
ARA Tomohiro (Fukushima University)				
OKU	BO Toshihiro (Keio University)			
ZHA	NG Hongyong (RIETI)			
TOMIURA Eiichi (RIETI / Hitotsubashi University)				
Fernando PARRO (Johns Hopkins University)				
SUGITA Yoichi (Hitotsubashi University)				
Amber LI (Hong Kong University of Science and Technology)				
Carsten ECKEL (University of Munich)				





Keith MASKUS (University of Colorado)

ISHIKAWA Jota (RIETI / Hitotsubashi University)

### RIETI-NISTEP Joint Workshop

### Rebuilding the Innovative Capability of Japanese Industry

https://www.rieti.go.jp/jp/events/19091701/info.html

Date September 17, 2019				
Venue	RIETI's Seminar Room			
Host	RIETI			
Co-host	National Institute of Science and Technology Policy (NISTEP)			
Programs				
Opening Rem	narks			
Session 1	Japanese Industry's Absorptive Capability for Science and R&D Performance			
	Contributions of Corporate Basic Research and Research Collaboration with Academia to Innovation and Spillover Performance in Japan			
	The Status Quo of Japan's National Innovation System: Findings and policy implications from the Japanese National Innovation Survey 2018			
	Impacts of National Research Grants on Academic Productivity: Evidence from the field of economics			
	Discussion			
	Q&A			
Session 2	Impacts of the Internationalization of Human Resources and Businesses			
	Global Knowledge Flow Network and Overseas R&D / Production Activities of Japanese Companies			
	Combining Knowledge and Capabilities across Borders and Nationalities Performance of international research collaborations			
	Discussion			
	Q&A			
Session 3	Designing Government Support for R&D			
	The Role of Subsidies in the Innovation Policy Mix—The case of the supporting industry program in Japan			
	Determinants and Impacts of Incorporation of Local Public Technology Transfer Organizations: Evidence from <i>Kohsetsushi</i> of Japan			
	Determinants of Staged Project Management and Success in Innovation: An empirical analysis based on the Fourth Round of the Japanese National Innovation Survey			
	Discussion			
	Q&A			
Closing Rem	arks			

Speakers / Panelists / Moderators

•
YANO Makoto (President and CRO, RIETI)
ODAGIRI Hiroyuki (Professor Emeritus, Hitotsubashi University / Commissioner, Japan Fair Trade Commission (JFTC))
EDAMURA Kazuma (Kanagawa University)
NAGAOKA Sadao (RIETI / Tokyo Keizai University / NISTEP)
ONISHI Koichiro (Waseda University)
TSUKADA Naotoshi (RIETI / University of Niigata Prefecture / NISTEP)
NAITO Yusuke (Artificial Life Laboratory, Inc.)
KADOWAKI Makoto (Hitotsubashi University)
IJICHI Tomohiro (Seijo University / NISTEP)
IKEDA Yuya (NISTEP)
OWAN Hideo (RIETI / Waseda University)
AKAIKE Shinichi (NISTEP)
NISHIMURA Junichi (Gakushuin University)
ITO Keiko (Chuo University / NISTEP)
IKEUCHI Kenta (RIETI)
DAIKO Taro (Japan Patent Office)
FUKUGAWA Shinya (Tohoku University)
MURAKAMI Yukiko (Waseda University)
OKAMURO Hiroyuki (RIETI / Hitotsubashi University)
SUZUKI Jun (National Graduate Institute for Policy Studies)
HANEDA Shoko (Chuo University / NISTEP)
NAKAMURA Tsuyoshi (Tokyo Keizai University)
HATA Shigenori (RIETI / National Institute of Advanced Industrial Science and Technology)
ISOGAI Keisuke (Director-General, NISTEP)



### RIETI International Workshop

### Entrepreneurship, Innovation, and Finance: New growth avenues in developed economies (Day 2) Professional Development Workshop

### https://www.rieti.go.jp/en/events/19092701/info.html

https://www	.rieti.go.jp/en/events/19092701/info.html		
Date September 27, 2019			
Venue RIETI's Seminar Room			
Host	RIETI		
Co-hosts	Institute of Business Research, Chuo University; JSPS KAKENHI Grant Number 16H02027 "Research on Startup Finance to Support Regional Revitalization" (Principal Investigator: UCHIDA Hiroshi, Graduate School of Business Administration, Kobe University)		
Programs			
Session 1:	Financial Systems in Japan		
	[1] Roles of the Public Credit Guarantee System and Regional Financial Institutions in Supporting Startup Firms: Evidence from a survey by the Aichi Credit Guarantee Corporation		
	[2] Lease Financing in Japanese Firms		
Session 2:	Startup Finance		
	[3] Do Japanese Venture Capitalists Support the Internationalization of their Portfolio Companies?		
	[4] The Impact of Entrepreneurial Human Capital on the Choice of Initial Funding: Evidence from a questionnaire survey in Japan		
Session 3:	Role of Venture Capital and Corporations for Innovation		
	[5] Communities of Investors and Startup Companies: An analysis using a bipartite stochastic block model		
	[6] The Role of Business Groups in Spawning Innovative Firms		
Session 4:	Role of Universities and Angel Investors for Innovation		
	[7] University Startup as a Source of Employment Growth? Empirical analysis using economic census data of Japan		
	[8] Potentiality and Actuality: Characteristics and linkage of entrepreneurs an angel investors in Japan		
Closing Addr	ess		
Speakers /	Panelists / Moderators		
FUKANUMA	Hikaru (Japan Finance Corporation)		
YAMORI Nob	uyoshi (RIETI / Kobe University)		
HOSONO Kad	oru (RIETI / Gakushuin University)		
HATAKEDA T	akashi (Kobe University)		
TSURUTA Da	isuke (Nihon University)		
TAKAHASHI I	Hidenori (Nagoya University)		
YAMADA Kaz	uo (Ritsumeikan University)		
Armin SCHW	IENBACHER (SKEMA Business School)		
KWAK Charee	e (Kyoto University)		
Gregory F. UI	DELL (Kelley School of Business)		

OHNISHI Koichiro (Waseda University)

NAKAMURA Hiroki (Chuo University)

OKAMURO Hiroyuki (RIETI / Hitotsubashi University)

NAGAOKA Sadao (RIETI / Tokyo Keizai University)



### TIER-RIETI-KIET Workshop

### Trade Tensions: Rising protectionism and supply chains

https://www.rieti.go.jp/en/events/19100201/info.html

October 2, 2019 The Sherwood Taipei			
The Sherwood Taipei			
RIETI; Taiwan Institute of Economic Research (TIER); Korea Institute for Industrial Economics and Trade (KIET)			
KS			
KIET Session chaired by NAKAJIMA Atsushi			
1st Presentation: "The Effect of U.S. Trade Remedies on Korean Firms"			
Q&A			
2nd Presentation: "Protective Effects of Rules of Origin on Global Supply Chain: Focusing on KOR-EU FTA"			
Q&A			
RIETI Session chaired by Chien-Yi CHANG			
3rd Presentation: "Trade Exposure and Electoral Protectionism: Evidence from Japanese politician-level data"			
Q&A			
4th Presentation: "International Trade and Domestic Production Network"			
Q&A			
TIER Session chaired by Ji-Sang CHANG			
5th Presentation: "Advancing APEC in the Face of Trade Tensions"			
Q&A			
6th Presentation: "On the Analysis of Global Value Chain and the Challenges of Trade Tensions to Taiwan"			
Q&A			
S			
anelists / Moderators			
G (President, TIER)			
ıshi (Chairman, RIETI)			
Ji-Sang CHANG (President, KIET)			

ITO Keiko (Chuo University)

IKEUCHI Kenta (RIETI)

MIYAKAWA Daisuke (Hitotsubashi University) Fabio BERTONI (EMLyon Business School) KIM Young Gak (Senshu University) NISHIMURA Yoichiro (Chuo University) HANEDA Shoko (Chuo University)

Soodong KIM (KIET)	
ITO Banri (RIETI)	
Jooyoung YANG (KIET)	
Chen HO (TIER)	
FUJII Daisuke (RIETI)	
Ko-Hsiung LIEN (TIER)	

### RIETI Workshop

### **Dynamics in Finance and Economy on Economic Networks**

### https://www.rieti.go.jp/en/events/19100801/info.html

https://www.rieti	.go.jp/en/events/19100801/info.html		
Dates October 8-9, 2019			
Venue	enue RIETI's Seminar Room		
Host	RIETI		
Co-host	MEXT "Exploratory Challenges on Post-K Computer," "Studies of Multi-level Spatiotemporal Simulation of Socioeconomic Phenomena: Macroeconomic Simulations"		
Programs			
(October 8th)			
Opening			
"Risks in Economi	c Networks: Increasing complexity, cascading failures, global dependencies"		
"Disaster and Cour	ntermeasure: Simulation on nation-wide supply chain data"		
Economic Comple	exity of Prefectures in Japan"		
"The Dynamics of	the Interbank Market: Stylized facts and agent-based models"		
"Loan Portfolio and	d Stock Price Correlations in the Banking System of Japan"		
"Interconnectednes	ss in the Corporate Loan Market"		
"Stock Prices and	the Real Economy: The different meaning of efficiency"		
Japanese Macroec	yment, Inflation, and Aggregate Demand in an Agent-based Model of the onomy"		
(October 9th)			
	Evolution of Japanese Production Network"		
	ep Learning to Forecast Stock Price Changes"		
-	ies of Transaction Networks among Bank Accounts"		
Cognitive Ability a nacroeconomic th	and Observed Behavior in Laboratory Experiments: Implications for eory"		
Closing			
Speakers / Pane	elists / Moderators		
AOYAMA Hideaki (	(RIETI / Kyoto University)		
YANO Makoto (Pre	sident and CRO, RIETI)		
Frank SCHWEITZE	R (ETH Zurich)		
NOUE Hiroyasu (L	Jniversity of Hyogo)		
Abhijit CHAKRABORTY (University of Hyogo)			
UJIWARA Yoshi (University of Hyogo)			
homas LUX (Kiel	University)		
Duc Thi LUU (Kiel	<i>,</i> ,		
_utz HONVEHLMA	NN (Kiel University)		
YOSHIKAWA Hiros	shi (Rissho University)		
	I (University of Technology Sydney)		
GOTO Hiromitsu (Nihon University)			

### SOUMA Wataru (Nihon University)

NAKAGAWA Yoshiaki (Shiga University)

HANAKI Nobuyuki (Osaka University)

RIETI International Workshop

### JSPS Core-to-Core Program: "Governance Reforms from Comparative Perspectives" Day 1: RIETI Workshop "Capital Market and Control"

### https://www.rieti.go.jp/en/events/19110501/info.html

Date		November 5, 2019			
Venue RIETI's Sem		RIETI's Seminar Room			
Host RIETI		RIETI			
CO-DOSTS		Waseda Institute for Advanced Study (WIAS); Japan Society for the Promotion of Science (JSPS)			
Programs					
Opening Re	marks				
Session 1:	"The	Role of Institutional Investors"			
	1. "The Engagement of Long-term Investors: The case of standard life"				
	Q&A				
	2. "Quiet Activism in Japan"				
	Q&A				
Session 2:	"Boai	d Reforms and Corporate Governance and Labor Relations"			
	3. "C	orporate Governance and Inequality: Wages and non-standard work in Japan"			
	4. "C	onsequence of Corporate Governance Reforms"			
	Q&A				
Session 3:	"Capital Market and Control"				
	5. "Asset Prices and Corporate Responses to Bank of Japan ETF Purchases"				
	Q&A				
	6. "Anatomy of Stock Returns in Japan from 1977-2017"				
	Q&A				
	7. "Stock Repurchases and Corporate Control: Evidence from Japan"				
	Q&A				
Closing Rer	narks				
Speakers	/ Pane	elists / Moderators			
HAMADA R	ikutaro	(Japan Society for the Promotion of Science (JSPS))			
YANO Mako	oto (Pre	sident and CRO, RIETI)			
Colin MAYE	ER (Uni	versity of Oxford)			
Marco BEC	HT (Un	iversité Libre de Bruxelles)			
Julian FRAM	NKS (Lo	ndon Business School)			
TANAKA Wa	ataru (T	he University of Tokyo)			
SUZUKI Kaz	SUZUKI Kazunori (Waseda University)				
Vikas MEHF	ROTRA	(University of Alberta)			
Gregory JA	CKSON	(Free University of Berlin)			
Yupana WIV	VATTAI	NAKANTANG (National University of Singapore)			
MIYAJIMA	Hideaki	(RIETI / WIAS)			
OSAKI Yusi	uke (Wa	iseda University)			
INOUE Kota	ro (Tok	yo Institute of Technology)			
OGAWA Ry	OGAWA Ryo (Chiba University of Commerce)				

### RIETI-IWEP-CESSA Joint-Workshop

# Current Issues in the World Economy: Exchange rate, invoice currency, price transmission and localization

Date December 18, 2019		
Venue	RIETI's Seminar Room	
Hosts	RIETI; Institute of World Economics and Politics, Chinese Academy of Social Sciences (IWEP, CASS); Center for Economic and Social Studies in Asia (CESSA), Yokohama National University	

#### Programs

Opening R	emarks			
Session 1				
	Paper 1: Debate on the Localization Rate in China: Macro and micro perspectives			
	Paper 2: Oil Price, Exchange Rate, and Japanese Stock Returns			
Session 2				
	Paper 3: Real Exchange Rate Movements and Export Quality: Upgrading of China's manufacturing industries			
	Paper 4: Exchange Rate Pass-through on Japanese Prices: Import price, produce price, and core CPI			
Session 3				
	Paper 5: How Does China's Fiscal Policy Affect the Changes in Current Account and Exchange Rate?			
	Paper 6: Invoice Currency Choice in Malawi's Imports from Asia: Is there any evidence of Renminbi internationalization?			
Closing Re	marks			
Speakers	/ Panelists / Moderators			
NAKAJIMA	Atsushi (Chairman, RIETI)			
Jie SUN (IV	NEP, CASS)			
SHIMIZU J	lunko (Gakushuin University)			
Xiaomin C	UI (IWEP, CASS)			
Shajuan ZH	HANG (Chuo University)			
IWAISAKO	Tokuo (Hitotsubashi University)			
Weijia DON	NG (IWEP, CASS)			
OGAWA Ei	ji (FF, RIETI / Hitotsubashi University)			
Risheng M	AO (IWEP, CASS)			
MASUJIM	A Yuki (Bloomberg)			
SASAKI YI	SASAKI Yuri (Meiji Gakuin University)			
Mi DAI (Be	Mi DAI (Beijing Normal University)			
Jianwei XU (Beijing Normal University)				
Panpan YA	NG (IWEP, CASS)			
SHIOJI Ets	uro (Hitotsubashi University)			
SATO Kiyo	SATO Kiyotaka (Yokohama National University)			
Qiyuan XU	Qiyuan XU (IWEP, CASS)			
AONO Koh	ei (Ritsumeikan University)			
KAWASAK	KAWASAKI Kentaro (Tovo University)			

KAWASAKI Kentaro (Toyo University)

### Pengfei LUO (Hitotsubashi University)

NAKATA Hayato (Meisei University)

YOSHIDA Yushi (Shiga University)

YOSHIMI Taiyo (Chuo University)

YOSHIMOTO Uraku (Yokohama National University)

Weiyang ZHAI (Shiga University)

Siyu ZHANG (Meiji Gakuin University)

Brown Bag Lunch (BBL) Seminars are held during lunch hours. We invite Japanese and foreign guest lecturers and provide a venue for candid exchanges of opinions on a variety of policy issues, transcending industry-government-academia boundaries. During FY2019, 51 BBL Seminars were held, bringing the total number to 1,202 as of March 31, 2020.

### https://www.rieti.go.jp/en/events/bbl/

\*The BBL Seminars listed below were held from April 2019 to March 2020.

\* Title and affiliations of speakers/commentators/moderators are current as of the day of the seminars.

April 8, 2019	Urgent and Important: Improving WTO performance by revisiting working practices	Speaker:	Bernard HOEKMAN (Professor and Director, Global Economics, Robert Schuman Centre for Advanced Studies, European University Institute)
2010		Moderator:	UENO Asako (Director, Multilateral Trade System Department, Trade Policy Bureau, METI)
April 10, 2019	Blockchain Foundations and Theory to Real Use Cases Explained by Silicon Valley Based Venture	Speakers:	Katerina STROPONIATI (Monday Capital) Yiannis VARELAS (Monday Capital)
	Capital Firm	Moderator:	<b>MOGI Takashi</b> (Deputy Director, Finance Division, Small and Medium Enterprise Agency, METI)
		Speaker:	FUJISHIMA Akira (Distinguished Professor, Director of Photocatalysis International Research Center,
April 11, 2019	Carbon Recycling Based on the Photocatalysis Technology	Moderator:	Tokyo University of Science) WAKUDA Hajime (Director, Policy Planning Division, Natural Resources and Fuel Department, Agency
2010	loomology	modorator.	for Natural Resources and Energy, METI)
April 15,	Outlook for the Asian Economy and Roles of the	Speaker:	NAKAO Takehiko (President, Asian Development Bank (ADB))
2019	Asian Development Bank	Moderator:	MORIKAWA Masayuki (Vice President, RIETI)
May 20,	Potential of Kansai Economy and Issues for World Expo 2025 in Osaka-Kansai: A case study	Speaker:	MORI Kiyoshi (Director-General, Kansai Bureau of Economy Trade and Industry, METI)
2019	of corrective action for the current economic	Moderator:	UENO Toru (CF, RIETI)
	concentration in Tokyo	0.1	
May 23,	2019 White Paper on Small, Medium, and Micro- sized Enterprises in Japan: Towards the success of	Speaker:	<b>UNO Yuya</b> (CF, RIETI / Former Deputy Director, Research Office, Business Environment Department, Small and Medium Enterprise Agency, METI)
2019	SMEs and micro businesses in the Reiwa era	Moderator:	SEKIGUCHI Yoichi (SF and RC (Research), RIETI)
May 28,	The Future of Funding Programs for Startups:	Speaker:	KITA Yosuke (Senior Analyst, Economic Policy Dept., Mitsubishi UFJ Research and Consulting Co., Ltd.)
2019	A comparative study of Western and Japanese programs	Moderator:	TAKATANI Shinya (Assistant Director, Technology and Innovation Division, Small and Medium Enterprise Agency, METI)
May 30,	World and Regional Economic Outlook—Growth	Speaker:	SUMI Chikahisa (Director, Regional Office for Asia and the Pacific, International Monetary Fund (IMF))
2019	slowdown, precarious recovery	Moderator:	OHTA Mineko (Director, Policy Planning and Research Office, Trade Policy Bureau, METI)
May 31,	Administrative Reforms and Management Accounting in Public Sectors: Practices by regional	Speakers:	OHNISHI Junya (Visiting Scholar, Policy Research Institute, Ministry of Finance (MOF)) TAKEMOTO Ryusuke (Management Consultant)
2019	bureau A	Moderator:	NABESHIMA Manabu (CF, RIETI)
	OECD SME and Entrepreneurship Outlook:	Speaker:	Lucia CUSMANO (Senior Economist and Acting Head of the SME and Entrepreneurship Division, OECD
June 7, 2019	Strengthening SME productivity in the digital	Moderator:	Centre for Entrepreneurship, Small and Medium-sized Enterprises, Regions and Cities (CFE)) OCHI Ryota (Deputy Director, Office for International Cooperation, Business Environment Department,
2013	economy	woodator.	Small and Medium Enterprise Agency, METI)
		Speakers:	IRIE Kazutomo (Managing Director, The Institute of Energy Economics, Japan / President, Asia Pacific
June 19,	APEC Energy Demand and Supply Outlook 7th Edition: Key trends for APEC and Japan through		Energy Research Centre (APERC)) WATANABE Rin (Researcher, APERC)
2019	2050	Moderator:	ISHII Hidehiko (Deputy Director, International Affairs Division, Agency for Natural Resources and
	Outline of the 2010 White Design on Manufacturing		Energy, METI)
June 20,	Outline of the 2019 White Paper on Manufacturing Industries (Monodzukuri): Strategies for	Speaker:	MIZUNO Masato (Director, Manufacturing Industries Policy Office, Manufacturing Industries Bureau,
2019	strengthening our manufacturing industries' competitiveness in the changing environment	Moderator:	METI) HASHIMOTO Yuki (F, RIETI)
		Speaker:	MATSUMOTO Takashi (Chairman, Federation of National Public Service Personnel Mutual Aid
June 28,	Disappointing Japanese Economic Growth and World	opeaker.	Associations)
2019	Economic Structural Changes	Moderator:	INOUE Seiichiro (CF, RIETI / Director, Macroeconomic Affairs Division, Economic and Industrial Policy Bureau, METI)
July 17,	Using Audit Experiments to Study Political and	Speaker:	James N. DRUCKMAN (Payson S. Wild Professor, Northwestern University)
2019	Market Discrimination	Moderator:	ONO Yoshikuni (FF, RIETI / Professor of Political Science, School of Law, Tohoku University)
July 25,	White Paper on International Economy and Trade	Speaker:	OTA Mineko (Director, APEC Office and Former Director, Policy Planning and Research Office, Trade
2019	2019: The current global economy and challenges to free trade	Moderator:	Policy Bureau, METI) ZHANG Hongyong (F, RIETI)
		Speaker:	Alan V. DEARDORFF (John W. Sweetland Professor of International Economics and Professor of
July 30, 2019	Twinne's Trade More, Mikers do un stando		Public Policy, University of Michigan)
	Trump's Trade Wars: Where do we stand?	commentator:	KAMATA Isao (Professor, Research Center of International Economy and Industry, University of Niigata Prefecture)
		Moderator:	JINJI Naoto (FF, RIETI / Professor, Graduate School of Economics, Kyoto University)

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August 6, 2019	Adoption of Information Technology in Healthcare Services	Speaker: Moderator:	Vivek GHOSAL (Department Head of Economics, Virginia and Lloyd W. Rittenhouse Professor, Rensselaer Polytechnic Institute) IKEUCHI Kenta (F, RIETI)
August 9, 2019	Annual Report on the Japanese Economy and Public Finance 2019	Speaker: Moderator:	IBARAGI Hideyuki (Deputy Director-General, Economic and Fiscal Management, Cabinet Office) INOUE Seiichiro (SF, RIETI)
September 4, 2019	2019 Survey of Capital Investment Plans	Speaker:	<b>TAKEGAHARA Keisuke</b> (Executive Officer, Deputy Chief Research Officer, Development Bank of Japan Inc.)
2010		Moderator:	AOKI Mikio (Director, Macro Economic Affairs Division, Economic and Industrial Policy Bureau, METI)
September 12, 2019	Economics of Family Well-Being	Speaker: Moderator:	YAMAGUCHI Shintaro (Associate Professor, Faculty of Economics / Center for Research and Education in Program Evaluation (CREPE), The University of Tokyo) SEKIZAWA Yoichi (SF and RC (EBPM), RIETI)
		Speaker:	LI Shih-Hui (Professor of Program in Japan Studies, College of International Affairs, National Chengchi
September 30, 2019	The New Platform for Japan-Taiwan Relations and Advanced Technology Exchange	Moderator:	University) ANDO Haruhiko (Vice Chairman, RIETI)
October 4, 2019	China's Social Credit System	Speaker: Moderator:	OKAWA Tatsuo (CF, RIETI) ANDO Haruhiko (Vice Chairman, RIETI)
October 17, 2019	The G20 and the World Economy: Performance and prospects	Speaker: Moderator:	Dale W. JORGENSON (Samuel W. Morris University Professor, Harvard University) MORIKAWA Masayuki (Vice President, RIETI)
October 25, 2019	Made in Shenzhen, Sold on Amazon: Examining new manufacturing with Anker Japan Co., Ltd.	Speaker: Commentator: Moderator:	IDO Yoshitsune (CEO, Anker Japan Co., Ltd.) NAKADATE Naoto (Assistant Director, Global Industrial Policy Office, METI) ANDO Haruhiko (Vice Chairman, RIETI)
November 7, 2019	Creative Work in the Times of Death-ridden Society	Speaker: Commentator: Moderator:	FUJI Kazuhiko (SF, RIETI) SHIBATA Kumiko (Chairman, Japan Transition Doula Association) YAMADA Keigo (CF, RIETI / Deputy Director, Personnel Division, Minister's Secretariat, METI)
November 8, 2019	Defense of Japan (Annual White Paper)	Speaker:	<b>GOMI Takashi</b> (Director, Policy Planning and Evaluation Division, Minister's Secretariat, Ministry of Defense)
		Moderator:	FUJI Kazuhiko (SF, RIETI)
November 13, 2019	ADB Asian Economic Integration Report 2019/2020—Demographic change, productivity, and the role of technology	Speakers:	SAWADA Yasuyuki (Chief Economist and Director General, Economic Research and Regional Cooperation Department, Asian Development Bank (ADB)) KIKKAWA Aiko (Economic Research and Regional Cooperation Department, ADB) OHNO Izumi (Director, JICA Research Institute)
the r		Moderator:	KAWAGUCHI Datiji (Professor, Graduate School of Economics, The University of Tokyo) FUJISAWA Hideaki (Director, Asia and Pacific Division, Trade Policy Bureau, METI)
	Indigenous People Meet the Leading Edge of	Speaker:	AOKI Masafumi (CEO, Alaska Trading Company, Ltd. / CEO, Organic 49 Club, Ltd. / Representative
November 14, 2019	Technology—Alaska Trading Company's efforts for sustainable development	Moderator:	Director, Alaska Association) HAYASHI Yotetsu (Director, Startup and New Business Promotion Division, Small and Medium Enterprise Agency, METI)
November 19, 2019	The Environment Japanese Venture Capitalists Need	Speaker: Commentator: Moderator:	KARIYAZONO Soichi (Managing Partner, Globis Capital Partners) TADOKORO Hajime (SF and RC, RIETI) SAKAMOTO Eisuke (Director, Fund Management Planning Division, Fund Management Department, Organization for SME and Regional Innovation, Japan (SMRJ))
November 26, 2019	Climate Change and the Role of Finance	Speaker: Moderator:	TAMAKI Rintaro (President, Japan Center for International Finance)        KAJIKAWA Fumihiro (Director, Environmental Economy Office, Industrial Science and Technology        Policy and Environment Bureau, METI)
November 28, 2019	The Technological Forefront of Quantum Computing	Speakers: Moderator:	KAWABATA Shiro (Group Leader, Nanoelectronics Research Institute, National Institute of Advanced Industrial Science and Technology (AIST) / Sub-program Director, Quantum Information Processing Area, Quantum Leap (Q-LEAP) Project, MEXT)      ARIMA Nobuaki (Director, Device Industry and Digital Consumer Electronics Strategy Office, Commerce and Information Policy Bureau, METI)      ANDO Haruhiko (Vice Chairman, RIETI)
December 5, 2019	Current Situation of the Venture Ecosystem in Japan and Future Prospects for Industry	Speaker: Commentator: Moderator:	AKAURA Tohru (General Partner, Incubate Fund / Chairman, Japan Venture Capital Association) TADOKORO Hajime (SF, RIETI) SAKAMOTO Eisuke (Director, Fund Management Planning Division, Fund Management Department, Organization for SME and Regional Innovation, Japan (SMRJ))
December 0	Can the WTO Survive? Rule of law in the multilateral	Speakers:	<b>OTABE Yoichi</b> (Former Ambassador Extraordinary and Plenipotentiary and Permanent Representative of Japan to the International Organizations in Geneva / Former Senior Deputy Minister for Foreign
December 9, 2019	trading system and Japan's role	Moderator:	Affairs) <b>KAWASE Tsuyoshi</b> (Professor, Faculty of Law, Sophia University) <b>KURODA Junichiro</b> (Director-General, Multilateral Trade System Department, Trade Policy Bureau, METI)
		Speaker:	NARITA Yusuke (VF, RIETI / Assistant Professor, Yale University / Visiting Assistant Professor,
December 10, 2019	Causal Machine Learning: From 21st century web industry to 22nd century public policy	Commentator/ Moderator:	Stanford University / Co-founder, Jinch Inc.) ICHIKAWA Tagui (Director General of AIST Tokyo Waterfront and Deputy Director General for Artificial Intelligence, The National Institute of Advanced Industrial Science and Technology (AIST))
December 11, 2019	World and Regional Economic Outlook—Global manufacturing downturn, rising trade barriers	Speaker: Moderator:	SUMI Chikahisa (Director, Regional Office for Asia and the Pacific, International Monetary Fund (IMF)) OIKAWA Keita (CF, RIETI / Deputy Director, Macro Economic Affairs Division, Economic and Industrial Policy Bureau, METI)
December 16, 2019	Frontier of AI and Face Recognition Technology	Speaker: Moderator:	IMAOKA Hitoshi (NEC Fellow, NEC Corporation) YOSHIDA Hiroki (Deputy Director, IT Project Office, Commerce and Information Policy Bureau, METI)
December 17, 2019	Irrationality of Human Resource Management in Japan Seen from Gender Discrimination in Medical Schools and Gender Segregation in Profession	Speaker: Moderator:	YAMAGUCHI Kazuo (VF, RIETI / Ralph Lewis Professor of Sociology, The University of Chicago) SEKI Hiromi (Deputy Director, Economic and Social Policy Office, Economic and Industrial Policy Bureau, METI)

December 19, 2019	Beyond TICAD7—Opportunities in powering African industrial development through UNIDO Energy (DOE)	Speaker: Commentator: Moderator:	OISHI Hiroshi (Chief Technical Advisor, Department of Energy (DOE), United Nations Industrial Development Organization (UNIDO)) ADACHI Mai (Deputy Director, Technical Cooperation Division, Trade and Economic Cooperation Bureau, METI) ANDO Haruhiko (Vice Chairman, RIETI)
December 26, 2019	Managing Currency Risk	Speakers: Commentator: Moderator:	ITO Takatoshi (Professor, School of International and Public Affairs, Columbia University / Professor, National Graduate Institute for Policy Studies) SATO Kiyotaka (Professor, Department of Economics, Graduate School of International Social Sciences, Yokohama National University) SHIMIZU Junko (Professor, Faculty of Economics, Gakushuin University) KOIBUCHI Satoshi (Professor, Faculty of Commerce, Chuo University) INOUE Seiichiro (SF, RIETI)
January 9, 2020	What <i>Sapiens</i> Suggests on Rulemaking and Innovation	Speakers: Speaker/ Moderator:	NAKAHARA Hirohiko (Deputy Director-General for Economic and Social Policy, Economic and Industrial Policy Bureau, METI)        FURUYA Hajime (Director, Startup and New Business Promotion Office, Economic and Industrial Policy Bureau, METI)        IKEDA Yoko (CF, RIETI / Deputy Director, International Policy Division, Japan Patent Office, METI)
January 10, 2020	Collective Action in a Fragmented World	Speaker: Moderator:	Jean PISANI-FERRY (Visiting Fellow, Peterson Institute for International Economics / Sciences Po, Paris / EUI, Florence / Bruegel, Brussels / Hertie School of Governance, Berlin) NAKAJIMA Atsushi (Chairman, RIETI)
January 14, 2020	Rugby and the Future of Japan	Speaker: Commentator: Moderator:	IWABUCHI Kensuke (Chairman, Japan Rugby Football Union) SAIKI Naoko (Director, Japan Rugby Football Union) MIYASHITA Hiroshi (Director, Service Industries Office, Service Affairs Policy Division, Commerce and Service Industry Policy Group, METI)
January 15, 2020	New Development of "Business Support Library" Useful for Regional Revitalization	Speaker: Commentator: Moderator:	YONO Momoko (Collection Building, Japan Business Library Association) TAKEUCHI Toshiaki (President, Japan Business Library Association / Visiting Professor, The University of Electro-Communications) ANDO Haruhiko (Vice Chairman, RIETI)
January 22, 2020	Big Data and Public Statistical Surveys: Creation, communication, and utilization	Speaker: Commentator: Moderator:	KONISHI Yoko (SF, RIETI / Specially Appointed Professor, Graduate School of Economics, Osaka University)        MUKAI Kentaro (General Coordination Office, Research and Statistics Department, METI)        INOUE Seiichiro (SF, RIETI)
January 29, 2020	New Renewable Energy Technology Development Through Industry-Government-Academia Collaboration: To compete with the world	Speaker: Commentator: Moderator:	SEGAWA Hiroshi (Professor, Graduate School of Arts and Sciences, The University of Tokyo) HIGASHINO Yasuaki (Assistant General Manager, Marubeni Corporation) ANDO Haruhiko (Vice Chairman, RIETI)
February 6, 2020	Current Status, Prospects and Challenges of Impact Investing in Japan	Speakers: Moderator:	ODA Satoshi (Knowledge Development Officer, Japan Social Innovation and Investment Foundation) ISHIKAWA Yoshiaki (CFO, Life is Tech, Inc.) UENO Sota (Co-CEO, Human Alba) SABURI Masataka (Director, PR Strategy, RIETI)
February 12, 2020	Critical Ideas in Confronting the Revolutionary Era of 5G & DX Technologies	Speaker: Moderator:	MORIKAWA Hiroyuki (Professor, Graduate School of Engineering, The University of Tokyo) ANDO Haruhiko (Vice Chairman, RIETI)
February 14, 2020	Rebranding Valentine's Day in Japan—Creating social innovation	Speaker: Commentator: Moderator:	OGAWA Noriko (Marketing Director, Flowering Japan Council / Flower Scene Producer) HAINO Tami (PR Manager, Park Corporation) SABURI Masataka (Director, PR Strategy, RIETI)
March 12, 2020	Special Dialogue "France and Japan: France is an important partner that Japan can rely on"	Speaker: Moderator:	KITERA Masato (Former Ambassador Extraordinary and Plenipotentiary of Japan to France) NAKAJIMA Atsushi (Chairman, RIETI)
March 19, 2020	Special Dialogue "Considering the Shape of This Country: Reflection and discussions on parliamentary democracy in Japan and the UK"	Speaker: Moderator:	TSURUOKA Koji (Former Ambassador of Japan to the United Kingdom) NAKAJIMA Atsushi (Chairman, RIETI)
March 27, 2020	China's Economy Facing both Internal and External Problems: Will this crisis create an opportunity to promote reform and opening-up? *	Speaker: Commentator:	MENG Jianjun (VF, RIETI / Senior Fellow, Center for Industry Development and Environment Governance (CIDEG), Tsinghua University) C. H. KWAN (CF, RIETI / Senior Fellow, Nomura Institute of Capital Markets Research)

\* Due to the spread of COVID-19, the event was held in the form of a "Special Interview," and the commentator also contributed a written comment to the speaker's presentation.

# List of Fellows

Name	Research Areas
President / CRO	
YANO Makoto	Dynamic Economics, Law and Economics, Market Organization
Senior Research Advisors (SRA)	
FUKAO Mitsuhiro	International Finance, Monetary Theory, Corporate Governance
NEZU Risaburo	Science and Technology, Information Technology, Industrial Policy, Trade Policy
Program Directors (PD)	
FUKAO Kyoji concurrent Faculty Fellow	International Economics, Macroeconomics, International Trade and Direct Investment in Asia, Innovation and Total Factor Productivity: Empirical Analysis Based on Industry and Firm-Level Data, International Comparison of Total Factor Productivity, Purchasing Power Parity in the 1930s, Gross Prefectural Product in Japan: 1874-2004
HAMAGUCHI Nobuaki concurrent Faculty Fellow	Spatial Economics, Regional Studies (Brazil)
KOBAYASHI Keiichiro concurrent Faculty Fellow	Endogenous Growth Theory, General Equilibrium, Business Cycles, Bad Debt Problem, Debt Control Policy, Macropolitical Economy
NAGAOKA Sadao concurrent Faculty Fellow	Policy and Institutions for Innovation
OHASHI Hiroshi concurrent Faculty Fellow	Industrial Organization, Trade Policy
TAKEDA Haruhito concurrent Faculty Fellow	Economic History of Japan, History of Industry and Business
TOMIURA Eiichi concurrent Faculty Fellow	Empirical International Trade
TSURU Kotaro concurrent Faculty Fellow	Comparative Institutional Analysis, Organizational Economics, Labor Market Institutions
Vice President (VP)	
MORIKAWA Masayuki	Economic Policy, Industrial Structure, Productivity, Labor Markets
Senior Fellows (SF)	
FUJI Kazuhiko	Effects of Trends in Crude Oil and Natural Gas on International Affairs, Impacts of Super Aging Society on Japan (including community theory), China's Political Economy, U.S. Political Economy, Energy Cooperation with Russia (Natural gas pipeline project in Sakhalin)
HAYASHI Shigeru	_
IKARI Hiroshi Specially Appointed	Development Finance, Capital Formation, Pension
INOUE Seiichiro concurrent Research Coordinator	Economic Trends, Economic Policy, Fiscal Policy
ISHIZAKI Takashi concurrent Research Coordinator	Regulatory and Administrative Reform, Market Structure, Energy Policy, SME Policy
IWAMOTO Koichi Specially Appointed	Renewable Energy, IoT / Industrie4.0, Regional Economy, German Economy, Chinese Economy
KOBAYASHI Toru	Intellectual Property Systems
KONISHI Yoko	Econometrics
NAKATA Hiroyuki Specially Appointed	Microeconomic Theory, Financial Economics
SAITO Yukiko Specially Appointed	Spatial Economics, Network Analysis, Industrial Organization
SEKIGUCHI Yoichi concurrent Research Coordinator (Research)	Local Economy
SEKIZAWA Yoichi concurrent Research Coordinator (EBPM)	Japan's FTA Policy, Application of Cognitive Therapy to Social Science
TADOKORO Hajime concurrent Research Coordinator	_

Name	Research Areas
TAMURA Suguru	Science and Technology, Innovation Policy
Willem THORBECKE	International Economics, Monetary Economics
YAMASHITA Kazuhito Specially Appointed	Food and Agricultural Policy, Issues for Intermediate and Mountainous Areas, WTO Agricultural Negotiations, Trade and Environment, Trade and Food Safety
Fellows (F)	
ARAKI Shota	Labor Economics, Applied Microeconometrics
ARATA Yoshiyuki	Macroeconomics, Industrial Dynamics, Stochastic Processes
HASHIMOTO Yuki	Labor Economics, Immigrant Workers, Job Segregation, Platform to Employment
IKEUCHI Kenta	Empirical Analysis on R&D, Innovation and Productivity
ITO Arata	Macroeconomics, Statistics for Economics
ITO Koichiro Specially Appointed	Environmental and Energy Economics, Industrial Organization, Public Economics
KAINOU Kazunari	Econometrics, Sustainable Development and Quantitative Policy Evaluation
KONDO Keisuke	Spatial Economics, Development Economics, Labor Economics, Applied Econometrics (Microeconometrics, Spatial Econometrics, Bayesian Econometrics)
LIU Yang	Labor Economics, Migration, Wages, Human Capital, Labor Markets
MAKIOKA Ryo	Applied Microeconomic, International Economics
ONOZUKA Yuki	Labor Economics, Economics of Education, Applied Microeconometrics
SENGA Tatsuro Specially Appointed	Macroeconomics, Macro-Finance, Firm Dynamics
SUMIYA Kazuhiko	Labor Economics, Public Economics, Applied Microeconometrics
YIN Ting	Macroeconomics, Household Economics, Chinese Economy, Labor Economies
ZHANG Hongyong	International Trade, Chinese Economy, Applied Microeconometrics
Research Associates (RAs)	
FUJII Daisuke	International Trade, Firm Dynamics and Macroeconomics, Supply Chain and Firm Networks, Urban Economics
GOTO Yasuo	Industrial Organization, SME Research, Financial Economics
ITO Banri	International Economics, R&D, Innovation
KATO Atsuyuki	Economic Growth, Productivity Analysis, Trade and Development
KAWAMURA Satoshi	Economic History of Japan, History of Transportation Industry, Industrial Safety Administration
KIYOTA Kozo	International Economics, Development Economics, Industrial Organization
KODAMA Naomi	Applied Microeconomics, Labor Economics
NAKATA Daigo	Public Economics, Public Finance, Social Security, Health Care
ODA Keiichiro	Game Theoretic Analysis of Investors' Strategic Interactions in Financial Markets
TANAKA Ayumu	International Trade
TOMOHARA Akinori	International Economics, Labor Economics, Public Economics
TSUKADA Naotoshi	Economics in Innovation, Industrial Organization
WAKABAYASHI Midori	Social Security, Welfare Economics
YAMAUCHI Isamu	Innovation, Research and Development (R&D) Management, Intellectual Property
YOKOO Hidefumi	Environmental and Resource Economics
YUDA Michio	Health Economics, Social Security, Applied Econometrics
Faculty Fellows (FF)	
AOYAMA Hideaki	Theoretical Physics, Econophysics
FUJIWARA Ippei	Macroeconomics, Monetary Economics, International Finance
FURUKAWA Yuichi	Macroeconomics, Monetary Economics, Intellectual Property Rights and Innovation, Market Quality Economics

Name	Research Areas
HATTA Tatsuo	_
HONJO Yuji	Entrepreneurship and Small Business, Business Economics
HOSONO Kaoru	Banking Regulations, Corporate Finance, Monetary Policy, Aggregate Productivity
INUI Tomohiko	Productivity Analysis, International Economics, Health Economics, Educational Economics, Chinese Economy
ISHIKAWA Jota	International Trade Theory
JINJI Naoto	International Economics, Environmental and Natural Resource Economics, Industrial Organization
KAWAHAMA Noboru	Antitrust Law, Competition Policy
KAWASE Tsuyoshi	International Economic Law, Trade Policy
KITAO Sagiri	Macroeconomics, Fiscal and Social Security Policy
KURODA Sachiko	Labor Economics, Applied Microeconomics, Work Hours, Time Allocation / Time Use, Mental Health and Workplace, Health and Productivity Management
KWON Hyeog Ug	Productivity Analysis, Industrial Organization
MANAGI Shunsuke	Environmental Economics, Resource Economics, Applied Microeconomics
MIYAGAWA Tsutomu	Macroeconomics, Japanese Economics, Asian Economic Trends
MIYAJIMA Hideaki	Japanese Economy, Economic History of Japan, Corporate Finance, Corporate Governance, Comparative Financial Systems
MORI Tomoya	Spatial Economics, Urban and Regional Economics
MOTOHASHI Kazuyuki	Applied Microeconomics, Economic Statistics, Econometrics, International Comparison of Productivity, Economic Analysis of Information Technology, Technological Innovation and Economic Growth, Innovation System, Input-output Analysis
NAKAMURA Ryohei	Regional Science and Urban Economics
NAWATA Kazumitsu	Econometrics, Statistics, Health Economics, Labor Economics
NIREI Makoto	Firm Dynamics, Macroeconomics, Complex Systems
NISHIMURA Kazuo	Nonlinear Economic Dynamics, Educational Economics, Neuroeconomics
NOMURA Koji	Economic Measurement, Productivity Analysis, Energy and Environment Economics
OGAWA Eiji	International Currency, International Finance
OKAZAKI Tetsuji	Economic History, Development Economics, Comparative Institutional Analysis
ONO Yoshikuni	Japanese Politics, Electoral Systems, Voting Behavior
OSHIO Takashi	Public Economics
OWAN Hideo	Personnel Economics, Organizational Economics, Labor Economics, Industrial Organization
SATO Motohiro	Public Finance, Local Public Finance
TABUCHI Takatoshi	Analysis of Urban Agglomeration Economies, Spatial Equilibrium, Interregional Differentials, Social Welfare in the Context of Urban Economics, New Economic Geography, International Economics, Spatial Competition Theory
TODO Yasuyuki	International Economics, Development Economics, Japanese Economy, Applied Microeconometrics
TOKUI Joji	Macroeconomics, International Finance, Empirical Analysis of the Japanese Economy
UESUGI lichiro	Corporate Finance, Small and Medium Enterprises, Japanese Economy, Money Markets
UNAYAMA Takashi	Household Behavior, Applied Econometrics, Index Theory
URATA Shujiro	International Economics, Development Economics
WATANABE Toshiya	Intellectual Property Management, Technology Transfer, Science and Technology Policy
YAMORI Nobuyoshi	Empirical Research on the Japanese Financial System
YOSHIKAWA Hiroshi concurrent Senior Advisor	Macroeconomics, Japanese Economy
Consulting Fellows (CF)	
ABE Takayuki	Service Affairs Policy, Macroeconomic Policy, Regional Science and Urban Economics
AKAHOSHI Yasushi	International Trade and Investment, Economic Growth (Innovation, etc.)
AMBASHI Masahito	Industrial Organization, Industrial Policy, Innovation, Economic Development (Asian Economy)

Name	Research Areas
ANDO Haruhiko	Alternative Energy, 3R and Exchange among Different Industries, Venture Company Innovation, Architecture, Intellectual Property Systems, Industrial Competitiveness
AOKI Mikio	Policy and Institutions for Innovation
ARAKAWA Kiyoaki	Interregional Migration
ARIMA Jun	Energy and Climate Policy
CHIKUSHI Masahiro	Energy and Nuclear Policy, Competition Law, Tax Law
EBIHARA Fumiaki	Security, Economic Growth, Energy and Environmental Economics, Administrative Evaluation
ENDO Noriko	Policy Development for Regional Industries, Entrepreneurship, Marketing, Organization (Network, Community, Nonprofit-Organizations)
ENOMOTO Shunichi	International Business, Servitization under IoT, Digitalized Production
ETO Manabu	Management of Technology, Standardization, Innovation Policy
FUJII Toshihiko	Corporate Social Responsibility, Global Rulemaking, Corporate Lobbying
FUJIOKA Masami	Healthcare, Public Health, Education, Child-rearing, Social Business, Venture, Labor Markets, Human Resource Development, Human Capital
FUJIWARA Yuka	Economic Growth, Labor, Innovation Policy
FUJIWARA Yutaka	Administrative Reform, Regulatory Reform, Global Environmental Problems, Regional Cooperation in Asia, Intellectual Property Policy
FUKUNAGA Yoshifumi	International Economic Law, International Political Economy, Regional Economic Integration of ASEAN and East Asia
FUKUOKA Noriyoshi	Industrial Policy, Healthcare Policy, Energy Policy
FUKUYAMA Mitsuhiro	Globalization, WTO, East Asian Regional Integration, Social Security, Labor Policy
HAMA Kentaro	Policy Evaluation, Causal Inference
HARA Keishiro	Future Design, Technology Policy and Innovation, Environmental and Energy Policy, Sustainability Science
HASHIMOTO Kenji	Human Resources, Education, Human Capital, Productivity, Al, Labor Markets
HASHIMOTO Shingo	Industrial Structure Analysis, Fiscal Analysis (National Debt Management, etc.), Social Security
HATA Shigenori	Innovation Policy, R&D Evaluation
HATTORI Takashi	International Relations, Trade Policy, Environment and Energy Policy
HAYAFUJI Masahiro	Trade and Related Policies, Trade Regimes, Economic History, Environmental Economics
HIKICHI Yuta	Policy and Institutions for Technology Management
HISHINUMA Takeshi	Intellectual Property, Private International Law and International Relations
HORI Tatsuya	Policy for Human Resources, Economic Analysis on Current Japanese Economy
IDEMITSU Keisuke	Data Science, Digital Innovation, Labor Markets, Human Capital, Productivity, HR Technology, Education and Human Resource Development in Response to the Fourth Industrial Revolution
IKEDA Yoko	Policy and Institutions for Innovation, Rulemaking, Global Governance
INUKAI Shinya	Macroeconomic Policy
IRINO Yasukazu	Creative Clusters, Branding Theory, Social Capital / Human Capital ("Life Based on Two Sites for Creative Human Resources and Formation of Smart Areas on the Back of Networking"), History, Industrial Legislation (Intellectual Property Rights, SMEs, Energy, etc.), International Politics (Security, International Strategy for Energy Resources, etc.), Innovation
ISHIDA Hiroyuki	Energy and Environment, Economic and Industrial Policy
ISHII Yoshiaki (Yoshi)	SME and Venture Business Policy, Industrial Organization, Innovation Policy
ITO Koji	Firms' International Activity (Trade, FDI, etc.), Dynamics of Firms
ITO Sadanori	Labor Markets, Education and Human Resource Development, Human Capital, Productivity, Al
KAMEI Hiromichi	Macroeconomy, Tax, Finance, Social Security
KATO Hajime	International Economics, Chinese Economy, Social Security
KAWASAKI Kenichi	Computable General Equilibrium Models, Macroeconometric Model, Trade and Investment Liberalization and Facilitation, Regulatory Reform, Macroeconomic Policy, Business Cycles, Economic Outlook, Household Saving Behavior, Determination of Wages and Prices
KAWASHIMA Yusaku	Leadership, Management, Decision Science, Economics, Finance, Technology Policy
KIDO Fuyuko	Quantum Chemistry, Innovation

Name	Research Areas
KIMURA Fukunari	International Trade, Development Economics, East Asian Economies
KIMURA Takuya	Trade and Investment Policy, Rulemaking, Management
KITAMURA Kenta	Energy Policy, Industrial Policy
KOBAYASHI Yohei	Public Economics, Applied Econometrics, Tax Policy, Public Finance, Social Security, Evidence-Based Policy Making, Urban Economics
KOIKE Takahide	Fiscal and Monetary Policies, Fiscal Risks, Uncertainty and Business Cycle, Independent Fiscal Institutions
KOMETANI Kazumochi	International Economic Law (Trade Law, Investment Law, and others), International Administrative Law, Competition Law
KONDO Seitaro	Government Budget Analysis, Government Cash Management, Currency Policy
KUMAZAWA Shingo	Policy and Institutions for Innovation
KUTSUZAWA Ryuji	Urban Economics, Analysis of Real Estate Prices, REITs, Policy and Institutions for Innovation
Chi Hung KWAN (C. H. Kwan)	China's Economic Reform, Regional Integration in Asia, Yen Bloc
MIURA Satoshi	Commodity Markets, Industrial Organization Policy, U.S. Political Economy, Evidence-Based Policy Making
MIZUNO Ryota	Trade Associations, Cooperative Finance, Local Industry, Antitrust Law
MUTO Sachio	Urban Economics, Transportation Economics
NABESHIMA Manabu	Electricity Policy, Evidence-Based Policy Making (EBPM)
NAGAI Hiroyuki	Macroeconomics, International Economics, Japanese Economy
NAGAMACHI Daisuke	Macroeconomics, Economic Growth, Public Investment
NAKADATE Naoto	Technology Management, Innovation Policy
NAKAGAWA Junji	Research on International Economic Law
NAKAMURA Yoshiaki	Industrial Theory, Industrial Policy, Management of Technology
NAKANISHI Tasuku	Development Economics, Management, Innovation, Trade/Investment and Economic Disparity
NAKATOMI Michitaka	International Economy, Trade Law, Trade Policy, Intellectual Property and International Standards, Investment Policy, Technology Policy, Digital Economy, Global Value Chains, Industrial Policy
NAKAZAWA Norio	Asian Economics, International Relations, Economic Thought, Market Analysis
NASUNO Futoshi	Employment/Human Resources Policies, Corporate Law, Global Warming
NISHIDA Akio	Macroeconomics, Public Finance
NISHIGAKI Atsuko	Governance Structure, IoT, Design Policy, WLB Policy
NISHIOKA Takashi	Social Security
NISHITATENO Shuhei	International Economics, Transport Economics, Environmental Economics, Japanese Economy
NISHIYAMA Keita	Impact of AI Development on Society, especially in terms of its influence on public's world-view
NOHARA Satoshi	Sustainability in Finance, Macroeconomic Management Policy
ODAKI Kazuhiko	Human Capital and Productivity, Real Estate and Finance
OGURO Kazumasa	Public Economics
OIKAWA Keita	Macroeconomics, International Economics, Econometrics, Public Economics, Industrial Organization
OKADA Yoshimi	Intellectual Property Rights, Knowledge Management, Innovation Policy
OKAMURO Hiroyuki	Empirical Studies in Industrial Organization and Business Economics, especially on small business, startups, innovation, R&D collaboration, and innovation policy
OKAWA Tatsuo	Startup Innovation in China, Industrial Policy
OKAZAKI Kohei	Japanese Economy, Evidence-Based Policy Making (EBPM), Behavioral Economics
SATO Katsuhiro	Strategic Management, Corporate Finance, M&A
SEKIGUCHI Kunio	Regional Economic Analysis, SME Analysis, Supply Chain Analysis
SHIMURA Kazuki	SME Finance, Business Systems and Strategy of SMEs
SHIRAISHI Shigeaki	Public Policy, International Economics, Service Economy, Energy
SHONO Yoshihisa	Macroeconomics, Econometrics, Policy Evaluation, Economic Inequality
SUEMASA Kenji	Economic Growth, Social Security, Health Economics

Name	Research Areas
SUGA Chizuru	Corporate Management, Policy and Institutions for Innovation, Cool Japan Strategy, Education and Social Security System
SUGIYAMA Seiji	Regional Economic and Industrial Policy, Productivity Analysis, Information Policy
SUMITA Takayuki	Mechanism of Innovation, Intellectual Asset Management, Energy Security
TAJIRI Yusuke	Innovation, Price
TAKAHASHI Takuma	Trade Policy, Macroeconomic Policy, Technology and Innovation, Aviation Industry, Urban Design
TAKEGAMI Shiro	Industry-University Cooperation, Open Innovation, Industry-Medical Cooperation, Regional Industrial Development, Security Export Control
TAMURA Akihiko	International Political Economy, Global Governance, International Economic Law, Regional Integration (especially EU and East Asian Region), Corporate Social Responsibility, China
TANABE Yasuo	Trade Policy, Energy Policy, International Relatons, International Governance
TANI Midori	Consumer Policy, Environment Policy
TANIZAWA Atsushi	International Trade Policy, Negotiation
TASHIRO Takeshi	Japanese Economy, Financial Administration Crisis, Financial Crisis
TOMOZAWA Takanori	Economic Growth, Innovation, Energy & Environment, Mobility, Digital, System Design
TSUCHIMOTO Ichiro	Competitive Intelligence, Risk Management, Crisis Management, Innovation Policy
TSUDA Hirokazu	Evidence-Based Policy Making (EBPM), Behavioral Economics, Entrepreneurship, Regional Economy
TSURUTA Hitoshi	Tariff Policy, International Trade Law, International Trade
UEDA Keiichiro	Policy and Institutions for Economic Growth
UEDA Yukiko	Startup Ecosystems, Business Environment Enhancement, Innovation, Business Attraction
UEKI Takayuki	Public Economics
UEMARU Atsuhito	Innovation Policy, Behavioral Economics, Development Economics, Evidence-Based Policy
UENO Toru	SMEs & Regional Economic Policies, Tourism Policy, Entrepreneurship Education
UNO Yuya	Public Economics
YAMADA Keigo	Cultural Heritage, Cultural Capital, Cultural Economics, Human Resource Development, Information Industry Policy, Corporate Strategy, Countermeasures against Climate Change, Energy and Environmental Economics
YAMADA Masato	Work-life Balance, Intellectual Property Policy, Countermeasures for the Low Birthrate, Consumer Policy, Regional Economies
YAMAKA Hiroshi	Macroeconomics, International Economics, Econometrics
YOSHIDA Ryohei	Macroeconomics, Japanese Economy, Monetary Policy, Social Security Policy
YOSHIDA Yasuhiko	Trade Policy, Trade Control, Infrastructure Export, Small Businesses, Manufacturing Industry, Industrial Development Policy
YOSHIYA Hiroyuki	International Economics (Monetary and Currency Stabilization, Economic Development, International Economic Order), Economic Growth, Social Security (Inequality and Distribution Policy, Healthcare), Human Resources, Work Style, Employment Systems
Visiting Fellows (VF)	
ITO Hiroyuki	International Macroeconomics, International Finance, Monetary Economics
MENG Jianjun	Development Economics, Industry Development, Environmental Policy
NARITA Yusuke	Design/Evaluation/Prediction of Education/Health/Labor Policies
OKIMOTO Tatsuyoshi	Financial Econometrics, Empirical Finance, Applied Macroeconomics, Econometrics
YAMAGUCHI Kazuo	Quantitative Methodology (Event-History Models and Models for Categorical Data), Work and Family, Work-life Balance, Models of Rational/ Purposive Social Action, Life Course and Occupational Career, Social Stratification and Social Inequality, Contemporary Japanese Society, Social Network, Exchange, and Diffusion, Epidemiology of Drug Abuse, Longitudinal Analysis of Drug Use History
YOUM Yoosik	Social Network Analysis, Sociological Processes of Health and Illness, Diffusion Dynamics of Sexually Transmitted Diseases, Health and Lives of Older People in an Aging Society
Visiting Scholars (VS)	
Shiro ARMSTRONG	International Trade and International Economic Policy, Foreign Direct Investment, East Asian Economy, Japanese Economy, Chinese Economy, Cross Straits Economic Relations, South Asian-East Asian Economic Integration, Australia-Japan Relations
Vivek GHOSAL	Economic Regulation, Competition Policy/Antitrust, Firm Strategy: Investment, Entry and Exit, Innovation, Environmental Regulations

### **Program Directors**

Each of the nine research programs has a Program Director (PD) who provides comprehensive research guidance in their research field and oversees appropriate cooperation between research programs to ensure that RIETI is undertaking efficient and substantive research activities which contribute to policy formation.

Program Directors		Research Programs
KOBAYASHI Keiichiro	Research Director, Canon Institute for Global Studies Research Director, The Tokyo Foundation for Policy Research	Macroeconomy and Low Birthrate / Aging Population
TOMIURA Eiichi	Professor, Faculty of Economics, Graduate School of Economics, Hitotsubashi University	International Trade and Investment
HAMAGUCHI Nobuaki	Professor, Research Institute for Economics and Business Administration (RIEB), Kobe University	Regional Economies
NAGAOKA Sadao	Professor, Faculty of Economics, Tokyo Keizai University	Innovation
OHASHI Hiroshi	Professor, Faculty of Economics, Graduate School of Economics, The University of Tokyo	Industry Frontiers
FUKAO Kyoji	Professor, Institute of Economic Research, Hitotsubashi University	Raising Industrial and Firm Productivity
TSURU Kotaro	Professor, Graduate School of Business & Commerce, Keio University	Human Capital
YANO Makoto (Acting Program Director)	President and Chief Research Officer, RIETI	Law and Economy
TAKEDA Haruhito	Professor Emeritus, The University of Tokyo	Policy History and Policy Assessment

(As of the end of March 2020)

### **Senior Advisors / Senior Research Advisors**

Senior Advisors (SAs) and Senior Research Advisors (SRAs) provide cross-sectional, comprehensive advice on RIETI's research activities and operations.

Senior Advise	ors	Senior Rese	earch Advisors
WAKASUGI Ryuhei	President and Chair of the Board, University of Niigata Prefecture / Professor Emeritus, Kyoto University / Professor	FUKAO Mitsuhiro	Professor, Faculty of Economics, Musashino University
	Emeritus, Yokohama National University	NEZU	
YOSHIKAWA Hiroshi	Professor, Faculty of Economics, Rissho University	Risaburo	Former Executive Fellow, Fujitsu Research Institute

(In alphabetical order, as of the end of March 2020)

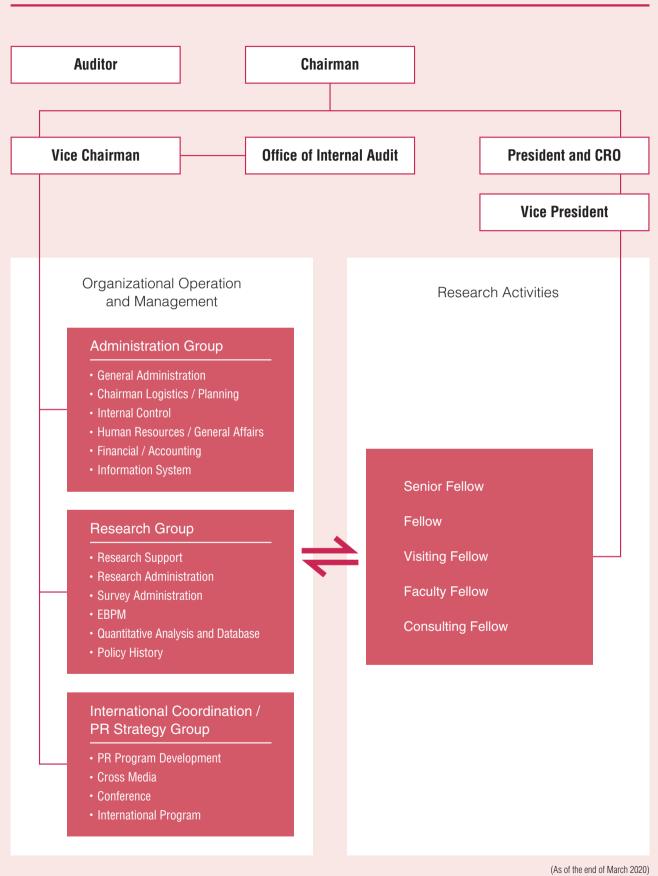
### **External Advisory Committee**

The External Advisory Committee, which consists of external experts at universities and research institutes, etc., verifies research progress and efficiency and considers measures to enhance RIETI's research activities.

Richard E. BALDWIN	Professor, The Graduate Institute of International and Development Studies, Geneva
FUKUI Toshihiko	President, The Canon Institute for Global Studies
Dale W. JORGENSON	Professor, Harvard University
KURODA Masahiro	Professor Emeritus, Keio University
TACHIBANAKI Toshiaki	Visiting Professor, Kyoto Women's University
YOSHINO Naoyuki	Dean, Asian Development Bank Institute

(In alphabetical order, as of the end of March 2020)

### **Organization Chart**





### Research Institute of Economy, Trade and Industry, IAA

11th floor, Annex, Ministry of Economy, Trade and Industry (METI) 1-3-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8901 JAPAN

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Image: Figure 1 and a state of the state



