

Exploring the Risks, Challenges & Opportunities of the Future



Editorial Committee Members

(Listed in alphabetical order by surname, as of April 2019)

Mohan Gopal

Representative Director, Art of Living Japan

Mohan Gopal is an Indian national who has been living in Japan for 28 years. He has held several positions including CTO of Camel International Group, strategist at Hewlett-Packard Enterprise and Product Marketing lead at Sybase. He is an IT industry professional and has been a business communications coach and university visiting faculty for many years. He has been a volunteer for over two decades with the Art of Living Foundation, an international NGO promoting yoga and peaceful thinking. He actively presents his views on business, culture and technology in Japan.

Nobuo Iizuka

Professor of Department of Economics, Kanagawa University & Adviser of Policy Data Lab at the Tokyo Foundation for Policy Research

Having worked for the *Nihon Keizai Shimbun (Nikkei)* and the Japan Center for Economic Research for more than 20 years as a journalist and an economist, Nobuo Iizuka is one of the most credible economists and commentators on the short-term outlook for Japanese business and economy. His economic analyses are always based upon his sharp, intuitive observations of business data.

Ken Karube

Executive Writer, Jiji Press

Ken Karube is executive writer for Tokyo-based wire service Jiji Press, which he joined in 1979 after graduating from Waseda University. He was a correspondent in Washington from 1992 to 1996, before becoming deputy editor of the economic news section in Tokyo. From 2004 to 2009, he was in the United States as chief of the Washington and New York Bureaus. Before taking his current post, he was deputy managing editor at the Tokyo head office (2010–2013). Among his books are *Failure of Economic Policy Management* (1999) and *Money Politics in the United States* (2009).

Sota Kato

Professor of International University of Japan & Executive Director of the Tokyo Foundation for Policy Research

After working for the Ministry of Economy, Trade and Industry for nearly a decade, Sota Kato started to pursue an academic career with Japanese universities and think tanks such as the International University of Japan, the Research Institute of Economy Trade and Industry (RIETI), and the Tokyo Foundation for Policy Research. Though generally considered a political scientist, his notable strength as a researcher lies in an interdisciplinary and quantitative approach to economics and politics. His expertise makes him a sought-after commentator on the Japanese political scene.

Long Ke

Project Professor of Global Center for Asian and Regional Research, University of Shizuoka & Senior Fellow of the Tokyo Foundation for Policy Research

Born in China and having studied economics at Nagoya University in Japan, Long Ke is a distinguished economist and opinion leader on the Chinese economy in the Japanese policy research community. He has long been an advocate of political reform in China as a key to achieving economic reform in the country.

Keiichiro Kobayashi

Research Director of the Tokyo Foundation for Policy Research & Professor of Department of Economics, Keio University

Keiichiro Kobayashi has experience in the economic policy-making process as a former government official at the Ministry of Economy, Trade and Industry. His interest in economic research led him to join RIETI and pursue an academic career. He has been an active commentator on economic policy issues, in particular fiscal and monetary policies, such as how to eliminate non-performing loans after the bubble economy in Japan. His current interest covers areas such as innovation and income inequality.

Kazumasa Oguro

Professor of Department of Economics, Hosei University

Having worked for the Japanese Ministry of Finance for several years, Kazumasa Oguro became deeply interested in academic research on the macroeconomy and public finance. He joined the Faculty of the Institute of Economic Research at Hitotsubashi University and later moved to Hosei University. He is one of the most active advocates of fiscal reconstruction, including a consumption tax hike to reduce the cumulative budget debt of the Japanese government. He is a first-class analyst of Japanese monetary policy in the international context as well as the global economy overall.

Sanjeev Sinha

President, India Japan Partnership Group/Fund (IJPG)

Sanjeev Sinha is president of IJPG and a keen promoter of investments between India and Japan. He previously worked with Goldman Sachs, Mizuho Securities and as chief representative of Tata Asset Management in Japan. He has lived in Japan since 1996 and is the author of four books - *Sugoi Indo (Amazing India)*, *Indo to Nihon ha Saikyou Combi (India-Japan: The Most Powerful Combination)*, *Sugoi Indo Business*, and *Indian Ways of Karma and Juggad* - all published in Japanese.

Mukesh Williams

Professor, Soka University & Visiting Faculty, Keio University

Mukesh Williams is a university educator, media writer and poet. He has taught literature, media and cultural history at St. Stephen's College, Soka University and Keio University. He co-authored the book *Representing India*, which provides a commentary on politics, literature, media and the Indian diaspora over the past two centuries. He has conducted seminars on global cultures and counseled Japanese universities on academic exchange and PR strategies. His favorite authors are Haruki Murakami and Saul Bellow.

Nariyasu Yamasawa

Professor of the Faculty of Management at Atomi University

Nariyasu Yamasawa is a professor of the Faculty of Management at Atomi University. He worked for the *Nihon Keizai Shimbun (Nikkei)*, the Japan Center for Economic Research, and is former director of the Statistics Commission Office, Ministry of Internal Affairs and Communications.

Jillian Yorke

Interpreter & Translator

Co-author of several books, Jillian Yorke worked for the Public Relations Office, Minister's Secretariat of the Ministry of Economy, Trade and Industry in Tokyo as an English editor and checker for more than a decade. She now lives in New Zealand, where she is curator of the Japan Library: Pukapuka, as well as a freelance writer, translator, and interpreter, and often visits Japan.

Table of Contents

Japan SPOTLIGHT Annual Review 2018

4 Introduction

What Are Anxious Individuals in Japan Thinking About How to Live a Proactive Life in an Age of Growing Uncertainty?

6 Roundtable on the Future of Japan with 3 Young METI Officials

New Technologies Affecting Economic Society (Space & Digital Technology)

12 The US-Japan Space Alliance – the Most Critical Bilateral Relationship for Peace & Prosperity

15 The Digital Economy & Privacy Protection: the Challenges Ahead

19 Digital Capitalism & Japan

24 A VUCA World in Digital Society

International Relations in Turbulence

29 Struggle for Global Hegemony – Real Implications of the China-US Trade War

33 Roundtable Discussion on the Chinese Economy – Opportunities & Challenges

39 US-China Rivalry: Implications for East Asia

45 Indo-Pacific Cooperation from Indian Perspectives

49 Jing Forum – a Venture for Youth Exchanges Between China & Japan

Changing Global Geopolitics

55 Overview on Understanding the Structure of Geopolitical Risks

57 The European Battleground: Geopolitics & the New Nationalism

61 Kim Jong Un's North Korea – What Has Changed?

66 North Korea: Myths & Reality

Future Design for the Future Generation

70 Future Design Research: the Issues

73 Future Design Applied in the Town of Yahaba in Iwate Prefecture

Published in April 2019

Introduction



As artificial intelligence (AI) develops, it is said that unemployment will rise since AI would replace many human jobs. But if human beings are more intelligent, they can get more sophisticated jobs and leave the less sophisticated ones to AI. Thus, in our future, education and lifelong self-learning will be crucial for us to maintain job opportunities. Knowledge will be a weapon with which to protect ourselves from the severe competition from AI. This is also the core message of *Japan SPOTLIGHT* Annual Review 2018. It will hopefully be useful for readers to know what kinds of risks, challenges and opportunities await us in the future and how to be well prepared for them. Our key message is the need to learn about the future by oneself in order to survive it.

What Are Anxious Individuals in Japan Thinking About How to Live a Proactive Life in an Age of Growing Uncertainty?

Anxious individuals surrounded by uncertainty are now standing on the threshold of the future. What are they anxious about? How can they live a proactive life in an uncharted era? We started *Japan SPOTLIGHT* 2018 by responding to those fundamental questions in our May/June 2018 issue, highlighting a METI young officials' report titled "Anxious Individuals & Governments at a Standstill" that had attracted a great amount of attention on the Internet.

Roundtable on the Future of Japan with 3 Young METI Officials

By *Japan SPOTLIGHT* (May/June 2018, Cover Story 1)

New Technologies Affecting Economic Society (Space & Digital Technology)

One aspect of the future is that technology and innovation will lead us to a new economic society where we can enjoy opportunities brought about by these new technologies but where we will also face risks and challenges stemming from them. For survival in such a society, we will need to learn about technologies, regardless of what we studied in high schools or universities, since knowledge of technologies will help in getting well-paid jobs or maintaining security from the risks of new technology. We chose space technology and digital technology as the issues for our cover stories of the July/August 2018 issue and November/December 2018 issue, respectively. We believe that those technologies will have the largest impact upon our daily life and our future will be utterly changed depending on how we can maximize the opportunities and mitigate the risks and challenges they will bring.

Interview with Dr. Saadia M. Pekkanen, Job and Gertrud Tamaki Professor at the Henry M. Jackson School of International Studies and Adjunct Professor at the School of Law, University of Washington

The US-Japan Space Alliance – the Most Critical Bilateral Relationship for Peace & Prosperity

By *Japan SPOTLIGHT* (July/Aug. 2018, Cover Story 1)

The Digital Economy & Privacy Protection: the Challenges Ahead

By Marc Rotenberg (Nov./Dec. 2018, Cover Story 1)

Digital Capitalism & Japan

By Takeshi Mori (Nov./Dec. 2018, Cover Story 6)

Interview with Dr. Tsuyoshi Abe, Senior Vice President & General Manager of the Marketing Headquarters, Yokogawa Electric Corporation

A VUCA World in Digital Society

By *Japan SPOTLIGHT* (Nov./Dec. 2018, Cover Story 8)

International Relations in Turbulence

International relations today also expose us to an uncertain future where a so-called G-zero world is spreading. Two superpowers are confronting each other: one, the United States, now seemingly less interested in leading global governance and more keen on protecting its national interests only under an "America First" policy, and the other, China, seemingly eager to take on a leading role in global governance but not yet knowing very well how to do so. In this struggle for global hegemony – in particular, in the high-technology security domain – the world is now becoming more chaotic as rules-based governance diminishes. The two superpowers' struggle for global hegemony was well described in our interview article in the November/December 2018 issue. How to restore global governance will be a crucial question in making our future more proactive. We assigned some space to discussing the future of China, our important neighbor. In particular, the METI White Paper on International Economy & Trade 2018 highlighted the opportunities and challenges of the Chinese economy, which was further examined by our roundtable discussion among economists in our September/October 2018 issue. Stable regional relations would contribute to stable global governance, and in this belief we examined how we could explore future relations in East Asia. How can East Asia mitigate the negative shock of the US-China "techno Cold War" and keep its momentum toward prosperity and continue to play a key role as a locomotive for global growth? We highlighted these questions in our January/February 2019 issue.



■ **Interview with Dr. Junhua Wu, Research Director & Chief Senior Economist of the Japan Research Institute**

Struggle for Global Hegemony – Real Implications of the China-US Trade War

By Japan SPOTLIGHT (Nov./Dec. 2018, Special Interview)

■ **Roundtable by Long Ke, Muneo Kurauchi, Prof. Kazuyuki Motohashi & Prof. Mariko Watanabe**

Roundtable Discussion on the Chinese Economy – Opportunities & Challenges

By Japan SPOTLIGHT (Sept./Oct. 2018, Cover Story 2)

■ **Interview with Dr. Vinod K. Aggarwal, Travers Family Senior Faculty Fellow and Professor of Political Science & Director of the Berkeley APEC Study Center (BASC) at the University of California, Berkeley**

US-China Rivalry: Implications for East Asia

By Japan SPOTLIGHT (Jan./Feb. 2019, Cover Story 1)

■ **Indo-Pacific Cooperation from Indian Perspectives**

By Sachin Chaturvedi & Priyadarshi Dash (Jan./Feb. 2019, Cover Story 2)

■ **Interview with Yixuan Zhang & Shu Kittaka, Presidents of Jing Forum 2018**

Jing Forum – a Venture for Youth Exchanges Between China & Japan

By Japan SPOTLIGHT (Jan./Feb. 2019, Cover Story 7)

Changing Global Geopolitics

Surveying and examining geopolitical risks globally is one of our important tasks in anticipating the future. The Japan Economic Foundation (JEF) conducted a second round of global risk symposiums in September 2018, following the first one in 2017. You can see a summary of the symposiums and the principal contributions from the panelists in our March/April 2019 issue.

■ **Overview on Understanding the Structure of Geopolitical Risks**

By Naoyuki Haraoka (March/April 2019, Perspectives on Global Risks: The 2nd JEF Global Risk Symposium 1)

■ **The European Battleground: Geopolitics & the New Nationalism**

By Sir Graham Fry (March/April 2019, Perspectives on Global Risks: The 2nd JEF Global Risk Symposium 2)

■ **Kim Jong Un's North Korea – What Has Changed?**

By Yong Sueng Dong (March/April 2019, Perspectives on Global Risks: The 2nd JEF Global Risk Symposium 3)

■ **North Korea: Myths & Reality**

By James E. Hoare (March/April 2019, Perspectives on Global Risks: The 2nd JEF Global Risk Symposium 4)

Future Design for the Future Generation

Why is it that we are so anxious about the future? For whom would we be worrying or searching for solutions? It may be true in most cases that it is for our own interest. However, depending on the issue, concerns about the future may not be related to us, the present generation, but to the future generation. How to deal with global climate change or how to be well prepared for an aging society – these questions go beyond the current generation's lifespan and continue for further generations. The future generation's interests are often ignored in policy discussions by the current generation, and so achieving sustainability of inclusive growth in responding to the needs of elderly poor people in the future or the global environment would be difficult. Future Design, highlighted in our March/April 2019 issue, supported and promoted by promising Japanese experts on a wide range of specialties, tries to tell how the future could be sustainable for the future generation as well.

■ **Future Design Research: the Issues**

By Keiichiro Kobayashi (March/April 2019, Cover Story 2)

■ **Future Design Applied in the Town of Yahaba in Iwate Prefecture**

By Ritsuji Yoshioka (March/April 2019, Cover Story 3)

Finally, I would like to repeat that lifelong self-learning will be a necessity for survival in the future, since only knowledge will help people in anticipating what lies ahead. This is similar to the proposition that regular physical exercise is vital for people over 60 in order for them to maintain good health.

Naoyuki Haraoka is editor-in-chief of Japan SPOTLIGHT & executive managing director of the Japan Economic Foundation (JEF).

R oundtable on the Future of Japan with 3 Young METI Officials

By Japan SPOTLIGHT

The Ministry of Economy, Trade and Industry (METI), formerly known as the Ministry of International Trade and Industry (MITI), has been playing a pivotal role in strengthening the foundations of Japan's economic progress during the postwar era through its unique capacity to formulate creative policy proposals. Given the transitions in the Japanese economy as well as the unprecedentedly large changes in the global economy, as seen in continuing low growth, geopolitical changes in international politics, and the ongoing Fourth Industrial Revolution, what do young METI officials responsible for the future of the Japanese economy and industries think about these challenges?

Young METI officials published an interesting and stimulating report on the future challenges for Japanese society in May 2017. The report was titled “Anxious Individuals & Governments at a Standstill”, and was drafted after spontaneous discussions between then METI Vice Minister Ikuro Sugawara and several young officials. Thus the project is called the “Vice Minister and Young Officials Collaboration Project”.

It is rather unusual in a Japanese government office with a hierarchical structure for young officials such as deputy heads or chief staff of a division to have spontaneous free discussions on any policy issue with a vice minister. This unique attempt has drawn much media attention and their report has been looked at by a large number of Japanese on the Internet since its publication. We are thus very happy to introduce the report by way of a roundtable discussion among three young METI officials involved in this project. The subtitle of the report is “How to Live a Proactive Life in an Uncharted Era” and their discussions not only covered the challenging issues we are facing but also possible solutions.

(Roundtable on March 16, 2018)

Participants



Erina Enomoto



Keigo Hidaka



Takanori Ito

Introductions

JS: Could you please briefly introduce yourself and explain how you got involved in this project?

Hidaka: I am Keigo Hidaka, deputy director of the Service Affairs Policy Division/Education Industry Office of the Commerce and Service Industry Policy Group. I am 37 years old, the oldest among

us, and have worked for METI for 12 years. Since joining METI in 2006, I have been working on specific policy tool making, such as for establishing laws or taxes, and I started feeling that I was only working in a narrow area and wanted to get out of specific domains and view METI's policies overall in the light of the whole industrial society from a wider perspective. This project consisted of two stages, the first for only nominated members and the second for members selected by a public application process. I am a member of

the second stage. I was also motivated by working with former Vice Minister Sugawara whom I respected very much having worked under his leadership on behalf of the director general of the Industrial Science and Technology Policy and Environment Bureau during the Great East Japan Earthquake disaster in 2011. The project in the first stage also published a report titled “Questions from the 21st Century to Japan” in 2015.

I am now very happy to be involved in the project, since my current official job in the education service industry is closely related to the project and I am also convinced that my views will be expanded by working with younger colleagues in METI with diverse opinions.

Ito: I am Takanori Ito, assistant director of the Technical Regulations, Standard and Conformity Assessment Policy Division. I am now in my fourth year since joining METI. Like Mr. Hidaka, I was interested in gaining a wider perspective on METI’s policies and our economic society having worked for METI for a couple of years. I was not selected by public application but assigned to the secretariat of the

project. While working in this secretarial job, I got a chance to participate actively in the discussions and also contributed to some extent to drafting the report.

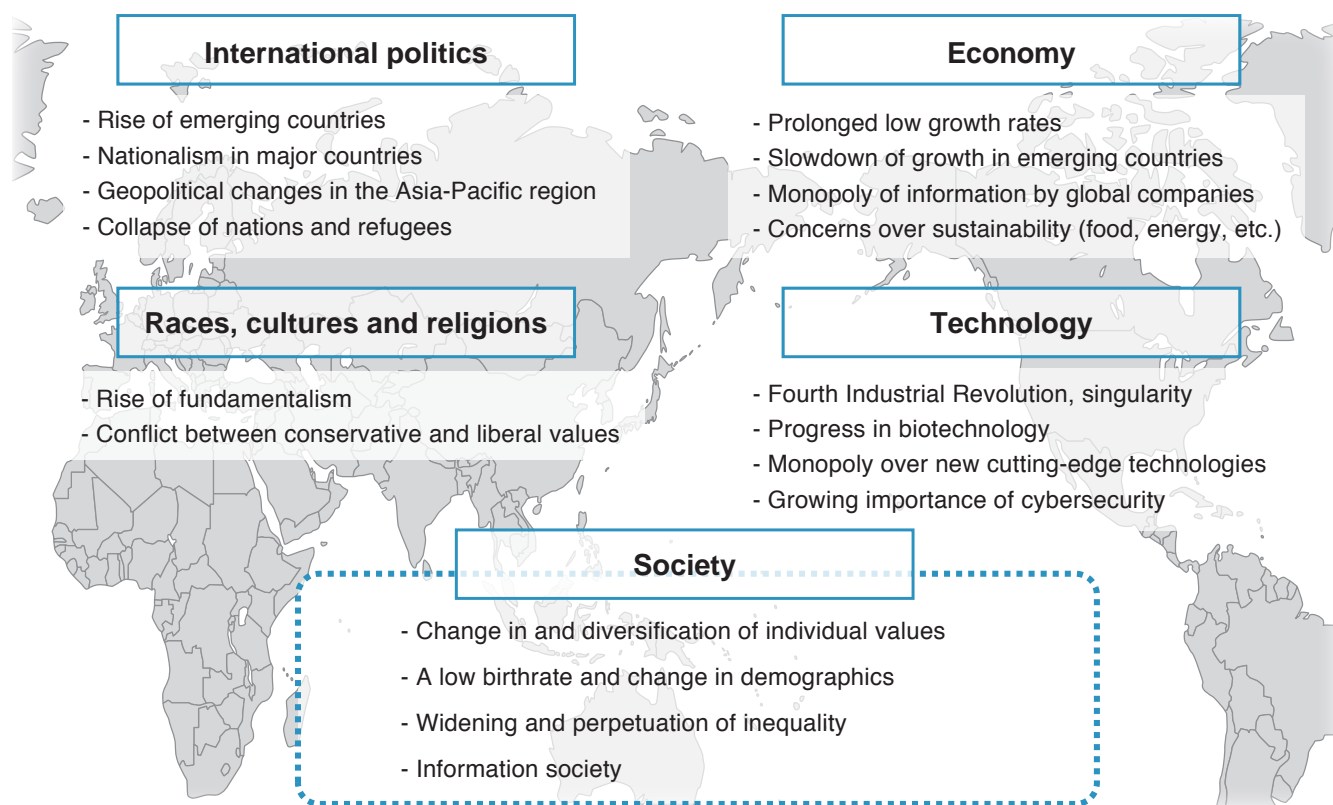
Enomoto: I am Erina Enomoto, assistant director of the Investment Facilitation Division at the Trade and Economic Cooperation Bureau. I joined METI in 2008, right after graduating from senior high-school. I was not involved in the discussions or report drafting for this project, but after its publication in 2017 I became interested in the report and decided to join the group as a new member when I participated in a Brown Bag Lunch seminar for METI officials on the published report and had a chance to talk with some project members.

Enhancing Individualism in Japanese Society

JS: The report describes changes concerning the future of Japan that should be debated (Chart 1). In

CHART 1

Global megatrends & scope of current debate



Source: Vice Minister and Young Officials Collaboration Project, Ministry of Economy, Trade and Industry (METI)

particular, it is noteworthy that Japanese society is undergoing a significant change in individual values and those values are diversified. In short, Japanese youth are increasingly pursuing their own options in life. As the majority are non-permanent employees and most Japanese organizations, unlike in the past, are today not run on a lifetime employment and seniority-based salary or promotion system, young employees do not share a sense of loyalty to their organization with their predecessors. Family ties also seem to be much looser than in older, more traditional Japanese families. While young Japanese used to be governed by authoritative bodies like a company or a family, they are today free from those authorities and have a wide range of choices on jobs, marriage and the other crucial decisions in life.

So Japanese society is moving from being organization-centered to individual-centered. Young people are free but they will increasingly need to take risks on their own and thus will feel anxious about their unpredictable future. Could you give us your comments on this observation in the report which I think is an essential part of it?

Ito: We note today that a talented individual could earn lots of money as in the case of successful entrepreneurs or a genius hacker who could threaten the international order. We are certainly living in an individual-centered society rather than an organization-centered one even in Japan. But it will indeed make people feel anxious about the future that an individual can have so many options in going through life.

Enomoto: I think this part of the report won great sympathy among the public in Japan. One of the reasons is that it focused on what many Japanese youth had been feeling in their heart.

Hidaka: The report stressed the need to promote institutional reform in Japan in order to meet the change in values among young people. Social institutions such as providing a safety net for entrepreneurs or a social welfare system ensuring an individual's security or reforms of working style to support an individual preference for self-realization are not well established yet in Japan in responding to such changes in values. The report strongly advocated for the need for structural reform in Japan. We should create "orderly freedom" in which an individual can take risks in his or her own choices by institutional and structural reforms of economic society. This is how, I believe, we can build up our own life by ourselves without depending on any authority.



Reforms to Achieve "Orderly Freedom"

JS: What kind of institutional reforms do you think are necessary to achieve "orderly freedom"?

Hidaka: The report mentions three things as necessary reforms. Firstly, we would need to create a social environment in Japan where elderly people even beyond retirement age can continue to work and contribute to society instead of being taken care of by others. Secondly, we should invest more in education. And finally, the many challenges we face would need to be resolved not only by the government but also by individuals endowed with passion and competency.

Enomoto: I think individuals should change their preconceptions about seniority or the way they work. As we live much longer today than people of earlier generations, we should have our own life plan after retirement. I also wish we could have a safety net for failures to encourage young people to start up businesses or any new project.

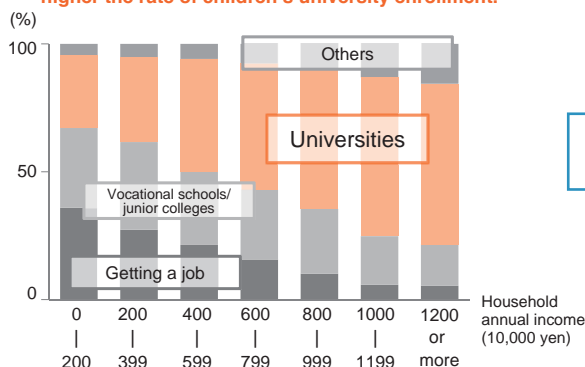
Ito: It seems that our Japanese management and employment system is no longer successful. But we haven't found yet a new system that can mitigate our anxiety over this collapse. The uniqueness of our project, I believe, is in proposing that the public think about a solution together with us. This is different from the Japanese bureaucrats' approach so far, which was always to provide solutions by themselves. We were happy to see so many readers of our report agree to collaborate with us in finding solutions, and I would like to continue to encourage such collaboration.

CHART 2

Children from poor families cannot escape the cycle of poverty

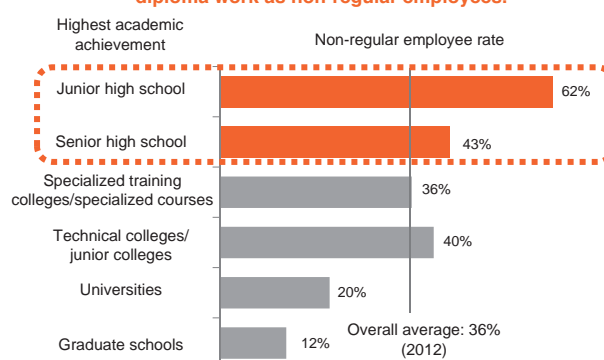
Life course after graduating from senior high school by household annual income bracket (FY2005)

The higher the parents' annual income is, the higher the rate of children's university enrollment.



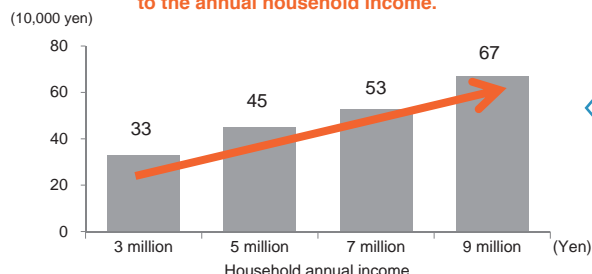
Breakdown of employment status by highest academic degree (2013)

Around half of people with a junior or senior high-school diploma work as non-regular employees.



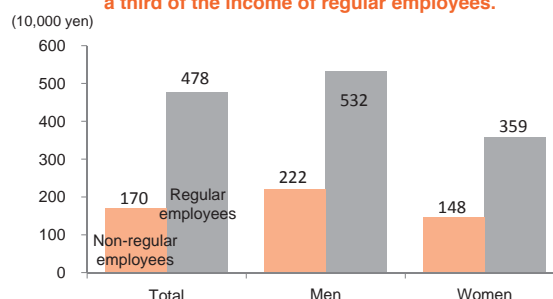
Per capita annual education expenditure by household income bracket (2009; when the child is in ninth grade)

Education expenditures increase in proportion to the annual household income.



Average annual income by employment status (2014)

The annual income of non-regular employees is a third of the income of regular employees.



Source: Prepared by the Ministry of Economy, Trade and Industry from "Employment Status Survey", "Labor Forces Survey" and "Statistical Survey on Private-Sector Salaries", Ministry of International Affairs and Communications; "Survey on Attitudes Toward Life", Japan Institute of Life Insurance; and analysis by the Research Institute for Advancement of Living Standards and Boston Consulting Group.

JS: Japanese bureaucrats today have been working well with NPOs or NGOs in pursuing policy goals. This is pretty much different from the old style of governance.

Hidaka: Yes. As people's needs are increasingly diversified, the national government alone would not be able to respond to each need specifically. Therefore, NPOs or social businesses are expected to fill the gap between these needs and the government's capacity. So I believe a good partnership between the government and NPOs will be key to enhancing our governance capacity.

Mitigating Poverty

JS: Another important issue in this report is poverty. The poverty of single-mother families, non-permanent employees or the cycle of poverty (Chart 2) should be central to mitigating individuals' anxiety in Japan. But the Japanese government is at a standstill due to its increasing debt. Instead of increasing support for poor families, the government is now trying to reform working styles in favor of workers' interests. What do you think about these issues related to increasing poverty in Japan?



Ito: The question of income inequality in Japan has always been discussed only in the context of the elderly poor. However, we found that single-mother households suffer from poverty most significantly. We also found the cycle of poverty as you mentioned. That is the most serious issue in the case of poverty in Japan. A single mother starts working, but in many cases she cannot work full-time because she has to take care of her kids at home as well. So she has to choose a non-permanent job, but the salary in this job is lower than otherwise. The low income will not enable her to let her kids continue to study at a university or other advanced educational institutes. Children ending their academic career at junior or senior high-school will find it difficult to get a well-paid job. This cycle of poverty needs to be cut off by some structural reform, like the introduction of a salary system based on job performance rather than working time, so that working single mothers can be paid better.

As for the elderly poor, in the light of the increasing financial burden to pay for their pensions in line with their longer lifespans, we should encourage them to work longer, for example, until the age of 75. Many elderly people in Japan are today very eager to work longer as their good health is also prolonged. By providing them with suitable working venues, they would be happy to work and then the budget for pensions would be reduced and the financial burden on the young generation would be less.

Hidaka: When we ask the elderly at a nursing care facility what they want to do most, they answer that they would like to work, even for any short time whenever their physical condition is good. This shows us how important it is for a human being to work and earn money and thus be convinced that they contribute to others. The current system of setting a retirement age seems even to deprive the elderly

of their reason for living. Without a fixed retirement age, the elderly can live a more proactive life.

Enomoto: Japanese society should accept the diversity of individual values. On the question of the poverty of divorced single mothers with children, I guess there is still a prejudiced view in Japan that single mothers should be responsible for their life after divorce, as divorce would be their choice. But I guess it will be necessary for society to be ready to support their individual choice without any preconceptions, such as that divorce is the wrong option and socially unacceptable. Preconceptions about age should be eliminated as well. Without such a culture denying the diversity of views, I believe that we could live a more proactive life.

JS: There is another preconception concerning job security in Japan. While most Japanese youth seek self-realization in their job, Japanese labor practices among business firms care only about job security. This is another area where we would need an institutional reform to meet the needs of the labor side. Employers and employees should conclude a job contract specifying the types of jobs to be done and specific requirements on the employers' side so that employees will be able to choose a job after judging whether it would be consistent with their goal of self-realization. If either side finds the concluded contract is not favorable to either of their interests, then after negotiation between the two the contract could be ended. In other words, if employees find the job not useful for their self-realization, they can quit, and if employers are not happy with the employees' performance, they can fire them after consultation. This is how we could gauge high individual value.

Hidaka: Yes, that is certainly a desirable direction for institutional reform to clarify an individual's responsibility and jurisdiction and thus enhance transparency. I think an institutional reform in general would meet with resistance from groups with vested interests in the existing system. For example, in the case of regulatory reform of dismissal legislation to enhance labor mobility by easing requirements for dismissal, male permanent employees would strongly oppose it. As our economy today faces an extremely rapid change of industrial structure and to respond to such a high-speed transformation of industries, we would need to have more labor mobility, but this holistic optimum is not necessarily corresponding to a specific group's optimum. Pursuing specific optimum would not lead to overall optimum; this is a fallacy of composition, according to economic theory, and we often find it.

Ito: I think it will be important to create a good working environment for working people. A job contract would be one of the tools to achieve it.

Innovation & Education

JS: What would be the best education for stimulating innovation? This is another core question covered by the report. As we live in the era of the Fourth Industrial Revolution, education is important not only for creating innovation but also for turning the workforce to jobs that cannot be replaced by AI or IoT. What do you think?

Hidaka: I think what is most important for future education in Japan is to raise individuals who can think and act on their own without simply following their teachers' instructions. In a Japanese school, we still keep a tradition of group-oriented activity. All the students are expected to follow a teacher's instructions unanimously. They have been raised to adjust themselves to life in a group and they are not expected to think and act independently. But without thinking and acting on their own, it would be difficult to initiate innovation. We will need human resources in the era of innovation who can discover issues and work on resolving them by themselves. I would assume those human resources should know exactly what they would like to do and then they could discover the issues to be resolved by themselves. AI would not be able to do this. AI could replace jobs that require less intelligence, but human beings could do more creative jobs such as finding issues to be resolved in business, the economy, and the community where they are living. We should spend the time saved by the efficient work of AI on creative activities. So I think education should be shifted in the future towards raising the capacity for independent thinking and acting. In achieving this, it might be better for a school teacher to take the students outside a classroom so that they can have contact with the real life of business or cultural activities, instead of just learning from a textbook in a classroom. Customized education in accordance with the diversity of academic performance would be preferable as well in order to raise each student's creativity.

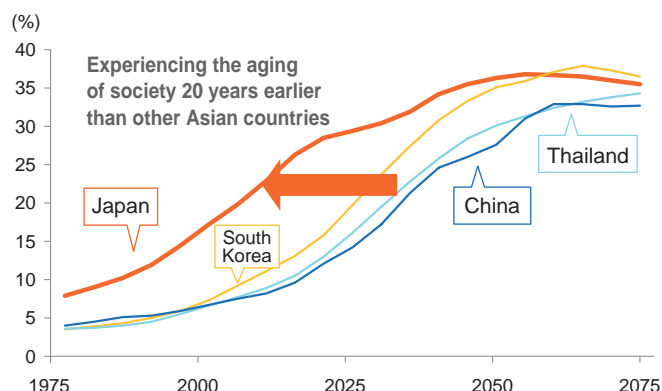
Final Comments

JS: Could you tell us finally what you would like to stress in this report or continue to explore further hereafter?

Hidaka: This project was an unprecedented attempt by government officials and a good experience for me. Encouraged by this, I would

CHART 3

Elderly population rates in Asian countries



Source: "World Population Prospects, the 2015 Revision", United Nations. The elderly population rate refers to the proportion of the population of people aged 65 or older in the overall population.

like to continue to work on discovering new values. Without changes born from new values, we will not be able to evolve.

Ito: I think individuals' attempts to solve social problems are important and to increase such attempts we should change the Japanese education system as Mr. Hidaka said. I would like to contribute to changing it and solve social problems as well with those who have passion and competency.

Enomoto: We should accept diversity of opinions as well as diversity of people. I also believe that we should be more generous about failures such as those in start-up businesses.

JS: Japan might be now in a transition period and people may suffer from anxiety about the uncertainty of the future. However, as the report says, individuals are doing their best in all areas to pursue a proactive life and mitigate their anxieties.

Hidaka: Finally, Japan is a pioneering country in aging among Asian nations (Chart 3). We are now working on creating a successful model for an aging society. This is an example of our pursuit of a proactive life. I hope our model can be a good reference point for other Asians in the future.

JS

Written with the assistance of TapeRewrite Corporation.

COVER STORY • The Future of Space as Global Commons • 1

Interview with Dr. Saadia M. Pekkanen, Job and Gertrud Tamaki Professor at the Henry M. Jackson School of International Studies and Adjunct Professor at the School of Law, University of Washington

The US-Japan Space Alliance — the Most Critical Bilateral Relationship for Peace & Prosperity

By Japan SPOTLIGHT

When we talk about national security today, space security is critical to ensuring peace, as the number of nations participating in space development is increasing and no national territory is defined in space. In light of the intensified competition among nations and space business firms, how can this important domain be managed by rules or international cooperation? How will the US-Japan alliance, the most important bilateral relationship in the world in terms of security and economic prosperity, work well to achieve this purpose? The Maureen and Mike Mansfield Foundation, which fosters US-Japan friendship among academics, business people and politicians in both countries, organized the US-Japan Space Forum in 2014. The details of this forum are presented by Ryan Shaffer, the foundation's director of programs, in another article in this issue. Here we introduce an interview by e-mail with Professor Saadia Pekkanen of the Henry M. Jackson School of International Studies at the University of Washington, who is co-chair of the US-Japan Space Forum. She is an expert on outer space security, law and policy as well as on international relations involving Japan and Asia. She is also a contributor to *Forbes* on the space industry.

(Responses received May 21, 2018)

Introduction

JS: Could you please briefly introduce us to your work on space in security and industry and also US-Japan relations in space collaboration?

Pekkanen: I work at the intersection of international relations and international law, specializing in the economic, legal, and security implications of the space industry worldwide. My specific regional focus is on Japan's foreign affairs, and given my broader interests I have followed very closely the trajectories of the country's space law and policy over the postwar period. Japan is one of the world's top space powers around today, and the changing aspects of its commercial and national security space directions deserve close attention. For the United States, Japan is an ideal partner for space collaboration along multiple dimensions as human economic activity begins to extend beyond the planet, and as a range of natural and deliberate dangers in space threaten the promise of those ventures. Over the past four years, I have had the tremendous honor of co-chairing the US-Japan Space



Dr. Saadia M. Pekkanen

Forum, under the auspices of the Maureen and Mike Mansfield Foundation. I have learned an enormous amount from the diverse perspectives of the forum's stakeholders, as they come from government, business, and academia. We have become a great transpacific community to learn from, and to build consensus views on outer space affairs and the possibilities of collaboration between our two countries.

Space as a Venue for Business

JS: How do you estimate the potential of the space industry and business in the future?

Pekkanen: The global space economy today is estimated to be around \$330 billion. There are projections that it will go beyond \$1 trillion by the 2040s. This is all thrilling and exciting for sure. But I think nobody can be quite sure of where the industry and business will actually head, or which private and public competitors will rise to the top in the years ahead. Right now, it is a very fluid situation, and I would say we are all somewhere near the starting line.

JS: What will be the main impact of space development on the existing industry? Do you think space will become one of the most promising venues for ventures and entrepreneurs?

Pekkanen: We usually think of the space industry in terms of rockets, spacecraft, satellites, and so on. But we have to begin rethinking what we know about them, and how we connect them to other policy trajectories among the world powers today. Reusable rockets are one development that we have to keep an eye on because of innovative players like SpaceX and Blue Origin in the US that are backed by billionaires. In Japan, we also see a similar phenomenon, such as Interstellar Technologies developing the country's first completely private rocket. This too has the backing of a Japanese billionaire. The more important point is that the high-profile nature of the billionaire rockets masks the way that reusable launch capability is critical not just for civilian or commercial markets but also national security space architectures. Another entrepreneurial trend that is worth marking is one that connects space assets like small satellites to big data and machine learning. If things stay the course, this trajectory promises to transform how we map, see, and strategize about human activities across civilian, commercial, and military domains on Earth.

JS: How do you view intensified competition in the future space business, in particular possible rivalries among nations?

Pekkanen: Countries are already competing in the space game, but expectations about the competition have shifted with the commercialization of the space industry. However, I think governments are going to be critical shapers of the ecosystem for the new space industry. And today, both in the developed and developing world, governments are still figuring out how to position their countries in the emerging space-based economy. I think one important aspect of the intensified competition for governments is going to come in securing human talent worldwide for creating next-generation space products and services. Governments are going to have to step up their efforts to shape the development of a space workforce that can then use such products and services in whatever domain they happen to be employed in. Shaping and sustaining a space workforce is going to be a challenge for established powers like Japan, China, India, Europe and the US, but also others who might want to get in the game such as the UAE. It will also be important for public-private efforts to advance the frontiers of space both in the commercial and military domains in the long run.

Space Start-Ups

JS: There are a number of distinguished US start-ups in Silicon Valley. How do you think they will contribute to future space development? Do you

think the so-called Silicon Valley model (interdependency among business, science, law firms or the public sector) would work as well in the space industry as it did in IT?

Pekkanen: Frankly, it is too early to say anything about any one space start-up, as we have yet to get concrete results on profitability of the many space ventures around us, whether in or out of the US. I think the so-called Silicon Valley model is good at drawing attention and funding to certain configurations of technologies for sure — and this is certainly important — but we need to be careful about painting too rosy a picture of its causal impact on business outcomes in the long run in any industry. There are surely variations in terms of business successes and failures, booms and busts, even in the IT field with which the model is so often associated. So I expect that we will probably see the same nuanced patterns in a wide variety of space products and services in the years ahead, whether in the US or abroad.

JS: How do you estimate the potential of Japanese start-ups in the space industry? Are they still in the stage of infancy?

Pekkanen: Today we talk about a space-based economy, with all eyes on the commercial players. If we are really looking at only the business of space, then many if not most of the up and coming commercial ventures will be subject to market pressures and realities in situations where returns on investment may be stretched out over time with a lot of uncertainty. So this is an important thing to remember as we think about the continued funding and resources from the Silicon Valley model that we just discussed. Nobody quite knows how things will work out when, for example, you are talking about commercializing asteroid mining or orbital debris cleanup or the general public going up and down as space tourists. Nobody quite knows also the size of the eventual market, if any. And nobody knows quite how long it will all take. So I would say that Japanese start-ups are in the same place as all other competitors in the world. They are lining up like a lot of other players at the starting line in what promises to be a long new space race. What kinds of space technology products and services will stand or fall over time, and who will have staying power in the competition ahead remains to be seen. Meanwhile, Japanese companies can draw on the country's long-standing industrial strengths — such as electronic miniaturization and robotics — that should not be underestimated and that will be critical for advancing space technology frontiers in new ways and perhaps in the context of cross-border collaborations.

Driving Force & Impediments to Space Industry

JS: Could you explain in detail about what you mentioned in one of your *Forbes* articles, “Five factors that will shape the space industry over the next five years”? What do you think will drive the development of space business and what do you think will be possible impediments to development?

Pekkanen: To be honest, I think these kinds of headlines do not do justice to the complexities of the space realities around us today. At the moment, I can pinpoint a few things that are going to be critical for the space economy in the years ahead. One of the most important aspects is the leadership of the new space companies, and the ways the new generation of CEOs are plugging their companies into a diverse global talent pool and workforce in order to better position themselves in the upcoming competition. This was one of the first things that struck me when I began to take a look at the composition of the new space companies in Japan. A second important factor that will contribute to the rise and spread of new space ventures is the legal and regulatory ecosystem. This is not only critical for stabilizing expectations today for both established and newer space companies, but also serving as a signal of government interest in facilitating the progress of the future space economy. Finally, we do have to worry about impediments. To my mind, as offensive counterspace realities come to the fore with alarming frequency, the single biggest danger to all the commercial ventures is the possibility of a space conflict.

JS: In particular, on space start-ups, what do you think will be necessary to promote their activities as government policies, regulatory frameworks or subsidies?

Pekkanen: Governments and their actions of course are not the only things that will shape outcomes in the space economy. But as I have been saying, I think governments will remain important players, either as buyers or backers, as the space economy takes shape. This is especially important in the context of the Asian space competition, with different traditions and cultures of government-business interactions. Take India, for example. The government-backed Polar Satellite Launch Vehicle (PSLV) launched 104 small satellites in one go in February 2017, and 31 satellites again in January 2018. Governments can also give significant backing through setting legal and regulatory expectations, and a number of them have established national laws and acts to foster the competitiveness of their space industries. In Japan, for example, the Japanese government's new law related to space activities is already bearing fruit in very interesting ways. Consider the recent moves that are bringing together the different competencies of Canon Electric, IHI Aerospace, Shimizu Corporation, and the Development Bank of Japan to construct the country's first private launch site, possibly in

Wakayama Prefecture by 2021.

Future Development of US-Japan Collaboration in Space

JS: How do you see the future development of US-Japan collaboration in space? Do you think it will be strengthened for security reasons?

Pekkanen: I mentioned the US-Japan Space Forum earlier, and how it has had a huge impact on opening my mind to many possible paths forward for the US and Japan as allies in space. If I could bring in the famous saying by Ambassador Mansfield in which he emphasized the importance also of economic and security linkages, I would say that today the US-Japan *space* alliance is the most important bilateral relationship out there, bar none. There have been a number of steady moves on the part of both countries to deepen their cooperation, especially if you think about the fact that space assets from the ground to the various orbits represent the critical infrastructure for war strategists and fighters back on Earth. Needless to say, the future of the space economy depends on this reality as well. In 2011, the US and Japan issued a joint statement, stating their interest in the protection of and access to space. So both sides need to devote resources to and work on solidifying a united and seamless front. Ensuring space security means preparing for peace.

JS: If you do not mind, could you tell us about your future projects, in research or mediation, between business and public policy or academia?

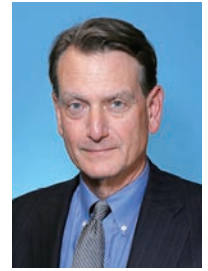
Pekkanen: Right now I am fortunate to have a two-year project funded by the Center for Global Partnership (CGP), focusing on new frontiers in space security and mapping new space strategies for Japan and the US. My collaborators on this project are John Mittleman, from the US Naval Research Lab; Setsuko Aoki, professor at Keio University Law School and vice director of the Center for Space Law at Keio; and Hiroshi Yamakawa, from Kyoto University, who has just become president of JAXA. We are a highly interdisciplinary team with backgrounds in engineering, political science, law and policy, which of course makes our work stronger but also more challenging to manage. So I am doing the systems integration on this project, so to speak! I am deeply honored to work with and learn from researchers and policymakers of their caliber. Together we are doing our bit to advance scholarship and policy outreach in various trajectories in the emerging space frontier, focusing at present on small satellites and big data in the maritime domain.

JS

Formatted by Naoyuki Haraoka, editor-in-chief of *Japan SPOTLIGHT* & executive managing director of the Japan Economic Foundation (JEF).

The Digital Economy & Privacy Protection: the Challenges Ahead

By Marc Rotenberg



Author Marc Rotenberg

The transformation is taking place rapidly. Services and sectors that were once distinct are now being joined together through digital networks. The thermostat in a home now connects to a cell phone. A car is connected to a computer network. A camera at a street corner broadcasts images to a police station far away.

These changes, brought about by the digital revolution, have also brought about far-reaching questions of law and policy. Some of the challenges are familiar — will automation lead to unemployment or will it create new, more advanced jobs? What is the appropriate balance to promote innovation while safeguarding important rights, such as privacy? Some questions appear new — should robots or their designers be responsible for the consequences of their acts? Does artificial intelligence (AI) mean that we can no longer assess the basis of outputs generated by automated procedures? For governments, business leaders, and representatives of civil society these problems are real and complex.

As new technologies converge in this information-enabled economy, I propose a central focus on transparency and accountability. The American inventor Thomas Edison once remarked, “What we create with our hands, we must control with our head.” It is good advice as we explore this rapidly changing world.

The Internet Age & the Protection of Privacy

Over the past two decades, we have witnessed the rapid change brought about by the Internet. The transition from a centralized voice network to a distributed data network has made possible the emergence of new businesses, new government services, and new forms of economic activity. But the Internet economy has also brought with it growing concerns about the loss of privacy, financial fraud, and identity theft. In the United States, the Federal Trade Commission (FTC) reports that identity theft is the second-biggest concern of American consumers, just behind debt collection (FTC, *Annual Summary of Complaints Reported by Consumers*, March 1, 2018). Data breaches are on the rise in the US, as there in much of the world, and there is growing concern that the attacks on personal data, stored by well-established companies with a commitment to privacy and security, are engineered by foreign adversaries. Again, the US has a warning tale for other countries. In 2015, the government records of 22 million federal employees, their friends, and family members were breached by foreign adversaries. The records disclosed included also the 5 million digitized fingerprints,

the unique authenticating details upon which security and financial transactions rely.

There is, therefore, real urgency to ensure that governments establish comprehensive programs for privacy and security to safeguard the personal data that is stored by both the private sector and government agencies. Central to the structure of modern privacy law are “Fair Information Practices”, the rights and responsibilities associated with the collection and use of personal data. The allocation of rights and responsibilities is necessarily asymmetric because the individual loses control over the use of personal data when it is transferred to another party. That is why organizations in possession are responsible for its protection. It is also the reason that individuals are given rights when their personal data is breached, misused, or expropriated.

There is also a need to develop, what I have called, “Privacy Enhancing Techniques” that minimize or eliminate the collection of personally identifiable information (Testimony of Marc Rotenberg, United States Congress, *Privacy in the Commercial World*, March 1, 2001). Such techniques include stored-value cards for transportation and communications that enable services without capturing the identity, or placing at risk the personal details, of the user. Robust techniques for de-identification and anonymization also permit the use of aggregate data and minimize the risk to the individual.

The European Union has taken a leading role in the development of a new legal framework to address the data protection challenges of the Internet age and to encourage the development of innovative techniques to provide consumer safeguards while safeguarding privacy and identity. The General Data Protection Regulation (GDPR), which went into force in May 2018, sets out a comprehensive approach to privacy protection. The GDPR builds on the Data Protection Directive of 1995 which was the first international framework for data protection.

The Japanese Act on the Protection of Personal Information, which came into force in May 2017, is part of the effort to build privacy frameworks that establish trust and confidence in the digital economy. Although there are some differences in the EU approach and the approach in Japan to data protection, the two frameworks have much in common. At a historic meeting in July 2018, the EU and the Japanese government agreed to work together to provide protection for personal data. Such an agreement will avoid the need for complicated business arrangements, such as standard contractual clauses, binding corporate rules, or privacy certifications.

The outcome will be the largest trading region in the world for the exchange of digital information with legal assurances of privacy protection. While it is too soon to evaluate whether the laws are sufficient or what new challenges may arise, both the EU and Japan are to be commended for this important step forward in the evolution of data protection.

The Internet of Things (IoT)

Still, the new challenges ahead are substantial and worrisome. The Internet has made possible not only the transfer of personal data across national borders, it has also connected physical devices to electronic networks on a mass scale making possible both the remote monitoring of machinery and services and also remote hacking. For example, in March 2018, Atlanta, Georgia suffered a ransomware attack that crippled the city's ability to provide services and to collect payments. City employees had been instructed to disconnect computers and perform their jobs manually.

In 2017, hackers using a ransomware program called "WannaCry" infected more than 300,000 computers worldwide, crippled the National Health Service in the United Kingdom, and disabled numerous international companies, including Federal Express. Hackers have demonstrated the ability to remotely deactivate the brakes on an Internet-connected car, disable door locks at a hotel, and adjust thermostat settings in networked home devices. Security experts, such as Bruce Schneier, have warned that we are seeing only the beginning of the risks of Internet-connected devices (*Click Here to Kill Everybody: Security and Survival in a Hyper-connected World Book*, by Bruce Schneier, W. W. Norton, New York, 2018).

Unlike the early challenges, which focused on privacy and data protection, these new challenges increasingly implicate public safety. Current safety regulations should be extended to take account of the risks of Internet-connected devices. The National Cyber Security Centre in the UK, perhaps drawing on the lessons from the attack on the NHS, urged the adoption of new measures to boost cyber security in Internet-connected devices. Critically, "manufacturers of 'smart' devices will be expected to build-in tough new security measures that last the lifetime of the product." (National Cyber Security Centre, *Secure by Design*, March 2018). This approach follows also earlier recommendations from the Aspen Institute 2015 conference on communications policy which recognized the ongoing risk that consumer devices would likely become more vulnerable to attack over time and that it was therefore necessary to establish a robust security plan for the lifetime of the device.

The US has been slow to recognize the growing threat of the IoT.

The Consumer Product Safety Commission, the agency tasked with protection for consumer products, has stated that the security of Internet-connected devices falls outside its domain. It is a surprising conclusion when products such as Google Home Mini are produced with a manufacturing defect that permitted remote monitoring of conversations within the home with no action by the user (CNN, *Google admits its new smart speaker was eavesdropping on users*, Sept. 11, 2017).

In contrast, the response in Europe to Internet-connected dolls appears very different. After a Norwegian consumer organization determined that the toy "My Friend Cayla" allowed the remote monitoring and recording of a child's conversation, European regulators responded quickly (Forbrukerradet, *Connected toys violate European consumer law*, Dec. 6, 2016). The German consumer agency banned the dolls and warned families that had purchased them to destroy them. The French data protection agency, the CNIL, warned the company that sanctions would be imposed if safeguards were not established.

Competition & Innovation

Another challenge facing societies today concerns the relationship between data protection and both competition and innovation. It is certainly true that personal data enables scientific innovation, medical breakthroughs, and the more efficient delivery of government benefits and private sector services. But the general proposition that data is useful does not answer the question whether firms should have unrestricted access.

Consider, for example, the decision by regulators to approve Facebook's acquisition of the popular messaging service WhatsApp. At the time the deal was proposed Facebook and WhatsApp offered competing services though with very different business models. Facebook relied on the advertising derived from knowledge of the user's interest and was able to offer the service, without much privacy, at no cost. WhatsApp chose instead to rely on a subscription model that offered strong protection for users but also required a small annual payment. Internet users had a choice of two messaging services.

Facebook's acquisition of WhatsApp created a real problem for regulators. In Europe, Facebook assured the European Commission that it would be unable to join the data sets of the two firms. In the US, Facebook told regulators it would respect the privacy commitments that WhatsApp had made to its users and not use personal data for advertising purpose. Both statements turned out not to be true. In fact, Facebook could join the data sets and did

indeed plan to break the commitments to Internet users WhatsApp had made. The Commission fined the company 110 million Euros (New York Times, *E.U. Fines Facebook \$122 Million Over Disclosures in WhatsApp Deal*, May 18, 2017). In the US, it remains unclear whether the FTC will impose any sanctions on the company.

Putting aside the business ethics associated with Facebook's acquisition of WhatsApp, it is important to consider whether such mergers promote data protection, innovation and competition, or whether the outcome is the opposite. Speaking at the World Economic Forum in Davos earlier this year, the American investor George Soros offered a clear warning about the future direction of the Internet economy, noting that Internet companies have often played an innovative and liberating role but also observing "as Facebook and Google have grown into ever more powerful monopolies, they have become obstacles to innovation, and they have caused a variety of problems of which we are only now beginning to become aware." Soros has proposed "the fact that they are near-monopoly distributors makes them public utilities and should subject them to more stringent regulations, aimed at preserving competition, innovation, and fair and open universal access."

I share his views. Increasing consolidation of Internet companies is not only bad for data protection, it has also stifled innovation and competition. Government regulators should be particularly skeptical of claims that joining mass troves of personal data will lead to further innovation. I have already described the growing risks of data breaches and the growing threats from foreign adversaries. After the mistaken decision to allow Facebook to acquire WhatsApp, we see also a collapse in competition in a key market for Internet services (*The Facebook-WhatsApp Lesson: Privacy Protection Necessary for Innovation*, Techonomy, May 4, 2018).

Algorithmic Transparency & Accountability

Among the greatest challenges today in the digital economy is also one of the most familiar challenges in modern privacy law: how to ensure the fairness, accuracy and accountability of decisions concerning individuals? This central concern, more so than secrecy or confidentiality as privacy is often understood, is also at the core of our modern right to privacy. Throughout the world privacy laws guarantee individuals with the right to know what information about them is held by others and how it will be used. Banks in the US, for example, have an obligation to explain the reason that a loan application was denied. And consumers are entitled to know the general factors that are considered in the creation of credit scores. But the precise factors, and the weight they are given, when

consumers are evaluated for loans and other commercial opportunities have never been made available with much precision. That will soon change.

With the adoption of the GDPR and the updated Privacy Convention of the Council of Europe, a new effort is underway to make transparent the algorithms that make decisions about consumers in the marketplace, that determine the placement of news on Internet platforms, and that make decisions in the criminal justice systems. Provisions of the GDPR now require that individuals be given an explanation and access to the logic of automated processing. Newly required data protection impact assessment will also require data processors to assess the use of rule-based decision-making. And the Council of Europe seeks to ensure that the protection of human rights and democratic values remain at the forefront of public policy concerning AI and algorithms (Council of Europe, Algorithms and AI Development, <https://www.coe.int/en/web/freedom-expression/algorithms-and-human-rights>).

Japan is now a leader in the effort to establish a comprehensive framework for the use of AI. Beginning in 2016, Japan urged the adoption of global policies for AI at the meeting of the G7. At the time, communications minister Sanae Takaichi described an international set of basic rules for developing AI (The Japan Times, *Japan Pushes for Basic AI Rules at G-7 Tech Meeting*, April 29, 2016). The "AI R&D Principles" seek to "achieve a human-centered society where all human beings across the board enjoy the benefits from their life in harmony with AI networks, while human dignity and individual autonomy are respected." (The Conference Toward AI Network Society, Draft AI R&D Guidelines, July 28, 2017). The Principles address such issues as collaboration, transparency, controllability, safety, security, privacy, ethics, user assistance, and accountability.

There is growing support for this approach among the member countries of the Organization for Economic Cooperation and Development. Scientific societies also support the effort to establish a global framework for AI. The Association for Computing Machinery, one of the world's largest computing societies, has stated, "the ubiquity of algorithms in our everyday lives is an important reason to focus on addressing challenges associated with the design and technical aspects of algorithms and preventing bias from the onset." (U.S. Public Policy Council of the Association for Computing Machinery, *Statement on Algorithmic Transparency and Accountability*, Jan. 2017). The IEEE-USA has said, "Effective AI public policies and government regulations are needed to promote safety, privacy, intellectual property rights, and cybersecurity, as well as to enable the public to understand the potential impact of AI on

society.” (IEEE-USA, *Artificial Intelligence Research, Development and Regulation*, Feb. 10, 2017). And the European Commission recently appointed 52 experts to a new High Level Group on Artificial Intelligence, with broad representation from academia, business, and civil society. The group will examine “issues such as fairness, safety, transparency, the future of work, and more broadly the impact on upholding fundamental rights, including privacy and personal data protection, dignity, consumer protection and non-discrimination.” (European Commission, *Commission appoints expert group on AI and launches the European AI Alliance*, June 14, 2018).

There is also support in the US. Former US presidential candidate Michael Dukakis has called for a global accord on AI. Governor Dukakis has recently launched the Artificial Intelligence World Society to make AI “safe, trustworthy, transparent, and humanistic” (The Michael Dukakis Institute, *Boston Global Forum and Michael Dukakis Institute will recognize two world leaders for achievements in Artificial Intelligence (AI) this April*, <https://dukakis.bostonglobalforum.org/tag/aiws/>). The proposals set out by the AIWS build on the recommendations of the Japanese government set out at the G7 in 2016.

Algorithmic Transparency

We at the Electronic Privacy Information Center (EPIC) welcome these developments. We first urged recognition for Algorithmic Transparency at the OECD Global Forum for the Knowledge Economy in Tokyo in 2014. We explained then that companies are too secretive about what they collect and how they use personal data. We called for the swift enactment of the Consumer Privacy Bill of Rights and the end of opaque algorithmic profiling.

The progress over the last several years is notable. But so too are the new challenges. In May 2017, EPIC urged the FTC to investigate a company that had launched a new commercial service for the secret rating of young athletes. We explained that neither the athletes nor their families could determine how these scores were assigned and that the rating system could determine not only success in sports, but also educational opportunities and scholarships. We said that it was very unusual to assign secret scores to athletes as most athletic achievement, whether measured in time or distance, is objective, public, and easily verified. We pointed also to the ELO system, the non-proprietary, scientific technique used to rate chess players that has been adopted in other activities.

More than a year has passed since we filed our complaint and still there is no action from the FTC. The secret and unaccountable scoring of young athletes continues. Moreover, concerns are

growing over the possibility that government will adopt techniques to score citizens. In China, for example, a social scoring system is underway that will create detailed profiles and ratings for each person in China. The rating system will determine opportunities for individuals in education, employment, housing, travel, and more. We believe such a government rating system is contrary to the principles of individual liberty and democratic society. There is even a risk that countries that create such systems may lose control over their creation as the systems become more complex and more decision-making is delegated to machines.

The Public Voice

This brings us then to our final challenge of data protection in the information age — to ensure that the public has a meaningful voice in the decisions made by government about the deployment of AI techniques. Earlier this year, EPIC submitted a formal petition to the US Office of Science and Technology Policy urging the creation of a public process to the development of AI policy for the US (EPIC, *Scientific Societies Call for Public Input on U.S. Artificial Intelligence Policy*, July 3, 2018). Leading scientific organizations in the US, including the American Association for the Advancement of Science, the Association for Computing Machinery, the Federation of American Scientists, and the IEEE, have joined the EPIC petition. Together we believe it should be possible to create policies to govern the use of AI that will preserve the dignity, autonomy, and freedom of the individual. And we have reported our call in statements to the US Congress.

We are therefore at a critical moment in our ability to regulate the technologies we create. The EU and Japan have put forward important legal frameworks to update protections for privacy in our digital age. We see also the new threats arising from the IoT, the growing concentration of Internet companies, and the increased dependence on AI techniques for a wide range of government and private sector services.

It would be a mistake to assume that either technology or markets alone will solve these challenges. Wise public policy, guided by evidence and meaningful public participation, is the key to our digital future.

JS

Marc Rotenberg is president of the Electronic Privacy Information Center in Washington, DC, a non-partisan research center that focuses on emerging privacy and civil liberties issues. He has served on expert panels for the American Association for the Advancement of Sciences, the American Bar Association, the Aspen Institute, the International Working Group on Data Protection, the National Academies of Sciences (US), the OECD Science, Technology, and Innovation Directorate, the US Senate, and UNESCO.

Digital Capitalism & Japan

By Takeshi Mori



Author Takeshi Mori

A Sense of Greater Well-Being

The digitalization of daily life took off in 2014, when 4th-generation smartphones began to be widely adopted. Data clearly show that this caused a significant change in the sense of well-being in the daily lives of the Japanese people.

The “sense of one’s standard of living compared to the rest of the Japanese public” as given in the response to the “10,000-Responder Survey on Life in Japan” conducted by the Nomura Research Institute (NRI) every three years shows an increasingly large number of participants giving their standard of living as “upper” or “upper middle” since 2006 (*Chart 1*).

Why has the sense of well-being among the Japanese public grown during this period even as GDP and wage levels stalled, and income disparity is said to have widened in Japan? What the people who responded “upper” or “upper middle” have in common is that they responded that they had “become able to consume wisely by collecting information on daily life and bargains through the Internet

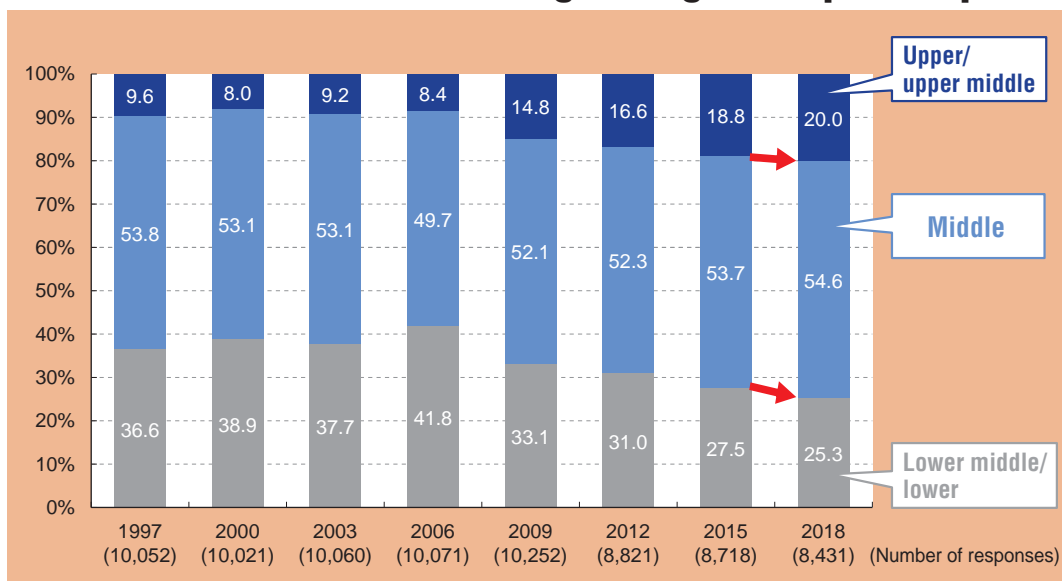
and other means”. It can be observed quantitatively here that the use of information technology has risen dramatically with the result that the standard of living can be sustained on a higher level even as income has remained stagnant.

GDP figures tell us that the Japanese economy is stalled. At the same time, the people experience well-being in their daily lives. Dig into this a little deeper and we realize that digitalization is providing us with something that does not show up in GDP statistics.

What digitalization has offered is a decline in price levels that was unthinkable before. Consumers can be thorough in comparing prices on the Internet, which puts relentless downward pressure on retail prices even if production costs remain unchanged. Online vendors can interact directly with consumers, eliminating the cut for the middleman. A report published by the Bank of Japan (BOJ) estimates that Internet retail sales could account for a price reduction of approximately 0.3% (“Impact of the Growth in Online Retail Sales”, *Bank of Japan Review*, June 2018), but it is possible that price decline is even larger in certain areas. Music and other merchandise

CHART 1

Sense of one's standard of living among the Japanese public



Note: No responses excluded from aggregation

Source: “10,000-Responder Survey on Life in Japan” conducted by the Nomura Research Institute (NRI) (1997-2018)

that can be digitalized can be copied at negligible cost, reducing overall production costs dramatically. Even when a product is functionally unchanged from its analogue days, its price and cost are greatly reduced by digitalization.

Producer Surplus & Consumer Surplus

When someone purchases a merchandise or service, there is a maximum amount that the person is willing to pay for that particular content. This is the “willingness to pay (WTP)”. The difference between the WTP and the actual price is the “consumer’s surplus”. Think of the consumer’s surplus as the degree to which consumers can feel that they have made a profit or secured a bargain.

On the other hand, the producer is actually producing its product at a lower cost than the price. It is gaining the difference between the price and cost as the producer’s surplus. This is the profit of the producer. Digitalization can influence WTP, price and the cost of things, but it seems price and cost have been lowered even though the WTP has not changed much. This is causing the consumer’s surplus to grow and the producer’s surplus to shrink.

To go back to the relationship between the impact of digitalization and GDP statistics, the key point is that the producer’s surplus is quantified and reflected in GDP statistics but the consumer’s surplus, given its subjective nature, is not measured and therefore goes unaccounted for. Thus, we look at GDP statistics without recognizing the consumer’s surplus that digitalization has amplified and sense that there is a gap between the economic trends and our impressions from our daily lives.

The sum of the consumer’s surplus and producer’s surplus is called total surplus, or economic welfare. This overall surplus could be viewed as the value-added in the true sense created by the merchandise or service. Overall surplus consists of the producer’s surplus, which can be objectively measured, and the consumer’s surplus, which can only be grasped subjectively. Overall surplus is difficult to identify as data. However, subjective matters can be quantified, as the NRI confirmed in its questionnaire survey. In a world where digitalization is progressing, it is becoming difficult to measure value with GDP as the sole indicator. The time is ripe for a new benchmark.

Free Digital Services in Japan

Internet usage is rising rapidly in Japan. According to a survey by

the Ministry of Internal Affairs and Communication (MIC), the average Japanese spent 86 minutes per weekend day on the Internet on average in 2013. This figure rose to 120 minutes in 2016 (MIC, *Survey on Time Spent on Information Communication Media and Information Activities 2017*). The numbers vary greatly between age groups. While the 10-19 and 20-29 age groups logged significant time, at 225 and 216 minutes respectively, the 60-69 group only used it for 43 minutes. The information and digital services provided over the Internet are making our daily lives so convenient, and much of this is being provided free of charge.

Erik Brynjolfsson, professor at the MIT Sloan School of Management, and Joo Hee Oh, assistant professor at the Rotterdam School of Management (RSM), Erasmus University, developed a model to express the consumer surplus that these free digital services produce in monetary terms and applied it to the United States (*The Attention Economy: Measuring the Value of Free Goods on the Internet*, 2012). According to this study, value equal to 2.3% of GDP was being produced on average between 2002 and 2011. The same model applied to Japan indicated that consumer surplus from free digital services could be worth up to 90 trillion yen per year, or the equivalent of 17% of GDP between 2012 and 2016. Japan has been gradually slipping from 20th among 63 countries in 2013 to 27th in 2017 in the IMD World Digital Competitiveness Ranking published by the International Institute for Management Development. As the IMD report notes, it is true that Japan lacks human resources in digital technology and Japanese businesses are slow to adopt digital technology. However, as the 90 trillion-yen consumer surplus shows, Japan is at the forefront in the acceptance of digital technology in the daily lives of its people.

The consumer surplus being produced by digital technology explains the paradox of the rising sense of well-being in the face of a stalling GDP. Digital technology is generating a significant increase in consumer surplus, i.e. the unmonetized value.

History of Capitalism

Digitalization is causing significant changes in the daily lives of the Japanese. It is also changing the economic system and capitalism itself, as can be seen from the significant loss in the effectiveness of traditional economic indicators (such as GDP). Let’s take a look at the characteristics and history of capitalism.

In this essay, capitalism will be defined as a “system for pursuing the permanent accumulation of capital by obtaining profits through

discovering, utilizing, and creating differences". Let's call the first stage of capitalism "commercial capitalism". This will be easy to understand if you imagine a merchant who engages in long-distance trade. The merchant buys merchandise at a low price in one country and sells it at a higher price in another. In other words, this is an activity that finds existing differences in the price system and earns profits from them.

The system following it, created through the 18th-century Industrial Revolution in the United Kingdom, is called "industrial capitalism". The Enclosure Movement turned communally-owned land into private property, chasing out the farmers there, who began selling their labor as if it were merchandise. Capitalists amassed labor, land, and other resources and achieved mass production through massive investments and division of labor. Under industrial capitalism, profits are accumulated by utilizing the difference between labor productivity and wages and creating products that are distinguished from those of competitors through innovation.

Actually, there is no consensus among experts over whether the ongoing digital revolution is creating a new stage in capitalism. There is a wide range of opinions, as some say that capitalism is nearing its end while others say that industrial capitalism is becoming ever more sophisticated. Still others say that a new type of capitalism, one that we haven't seen before, is emerging.

Klaus Schwab, the originator of the World Economic Forum, calls

the ongoing digital revolution the Fourth Industrial Revolution, and the German government is promoting what it calls Industry 4.0. As the terms show, these people believe, or hope, that industrial capitalism will be enhanced through progress in digitalization.

By contrast, as Peter Drucker stated, "That knowledge has become the resource, rather than a resource is what makes our society 'post-capitalist'." Dr. Katsuhiko Iwai, emeritus professor of the University of Tokyo, states that the era of post-industrial capitalism has begun and points out that the capitalism at the dawn of the Internet actually has the characteristics of commercial capitalism, the primeval form of capitalism, in that it creates value from differences in information.

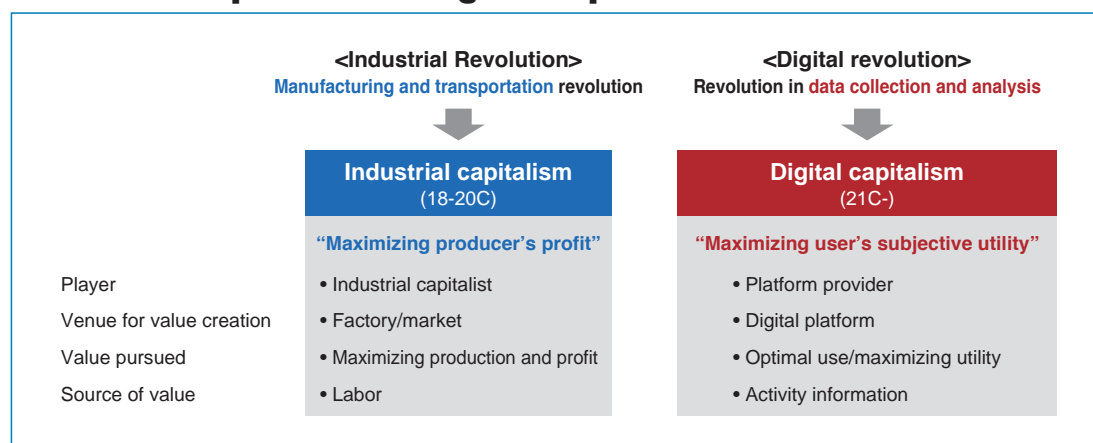
The Arrival of Digital Capitalism

This report agrees with Dr. Iwai that capitalism has metamorphosed into a new form, which I will call "digital capitalism". There are several reasons for this. First, those who call the ongoing digital revolution the Fourth Industrial Revolution and Industry 4.0 are the main players of industrial capitalism. The more they are invested in the existing capitalism, the more likely their mindset is unconsciously biased and that they have a vested interest in denying that industrial capitalism is coming to an end.

Next, a comparison of the ongoing process with industrial capitalism shows that value is coming to be created in a

CHART 2

Industrial capitalism & Digital capitalism



Source: NRI

fundamentally different manner. The Industrial Revolution, in short, was a revolution in production and transportation. There, the industrialist was the value creator, and physical factories were the places where the value was created. The value being pursued was quantitative expansion; growth through mass production and consumption was the aim. And labor was an important source of this value.

By contrast, the digital revolution is a revolution in the capacity for data collection and analysis. Here, digital platforms become the venue for value creation. The core value is no longer mass production and consumption, but optimal utilization by or maximizing utility for the user. The sharing economy is the framework that embodies this value and is difficult to conceive under the industrial capitalism framework. The development of car-sharing services increases options for the user, enhancing convenience, but it is likely to reduce the number of cars sold as its share grows. As a result, while the frequency of travel and the market for car-sharing grows, production in the automobile manufacturing sector declines, with a possible negative net impact on GDP. This is the paradox that may arise when GDP, a benchmark of industrial capitalism, is used.

The digital revolution is also creating new sources of value: the information activities that we humans as well as machines are generating. Just as human labor was separated and turned into merchandise in the Industrial Revolution, all information activities by humans and machines are currently being separated from their sources and sucked into platforms to be conglomerated as Big Data, from which value is extracted through analysis (*Chart 2*).

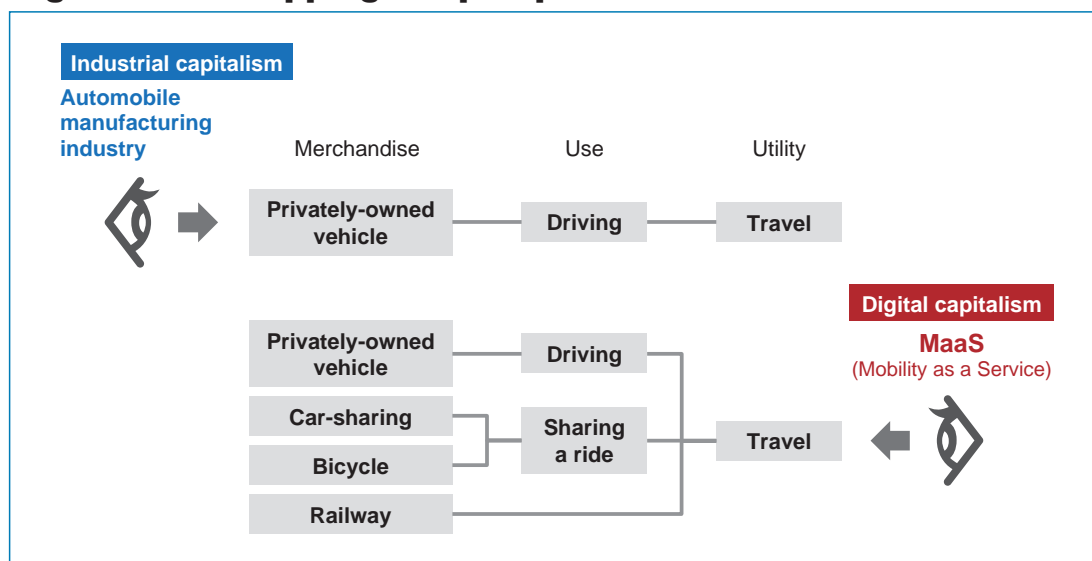
Flipping the Perspective on Industry

“Mobility as a service”, or MaaS, has emerged as a concept in transportation. This describes service as a business that provides the optimum means of travel from the user's perspective, a concept that transcends existing industrial categories such as automobile manufacturing and transport. There, whether or not you possess a vehicle is irrelevant. The choice between a taxi, ride-sharing like Uber, or renting a car P2P depends totally on the level of convenience for the user.

Under industrial capitalism, business traced the supply chain in which the producer is the starting point. The producer makes the

CHART 3

Digitalization flipping the perspective 180°



Source: NRI

product by procuring materials and the complex distribution channel leads to consumers at the end. There, the preferences of the individual consumer were given relatively little consideration. The “masses” were supplied with mass-produced merchandise.

By contrast, in digital capitalism, the user is the starting point. The needs and references, the payment capability, indeed every element of each user is analyzed using artificial intelligence (AI), then reverse-engineered to find the optimal solution. Here, there is no such person as a standard-issue member of the “masses”, just a wide variety of individuals that are connected by a wide variety of networks so that they are both “I” and “we” in a mandala-like world (*Chart 3*).

The term “industry” will gradually lose meaning in a world like this. “Industry” is a word used from the perspective of “what is being manufactured”, whereas “what kind of utility is being provided to users” is the key perspective in digital capitalism.

From Labor Society to Action Society

The role of humans also changes under digital capitalism. Let's explore this point using the framework provided by Hannah Arendt, one of the most representative philosophers of the 20th century. In her book *The Human Condition*, Arendt divides “active life” into three types of activity: “labor”, “work” and “action”. She defines labor as repeated processes, work as having a clear beginning and end, and action as the means by which we disclose ourselves to others. She is said to have explained the difference between labor and work as “kitchen and typewriter”. The kitchen is where labor takes place and the typewriter is where writing, or work, is conducted.

Arendt goes on to call the industrial capitalism of the 20th century the victory of “animal laborans” and states that among the three categories, the proportion of labor has grown overwhelmingly large. Then what has been the effect of the ongoing digital revolution on the role of humans, or “labor”, “work” and “action”? First, labor is coming to be replaced by machines and AI. Human labor is being pushed out of the workplace, much as farmers were pushed off the land by the Enclosure Movement at the dawn of the Industrial Revolution. Meanwhile, action by humans is increasing dramatically under digitalization, albeit in cyberspace and many actions are still done by hiding identity. It covers a wide range of activities using social network services such as posting one's activities and communicating with others on social networking sites as well as posting reviews on Amazon, TripAdvisor, and the like.

Moreover, you are disseminating information on your activities unintentionally such as where you are going through your smartphones and your preferences and interests through your online searches.

Take the YouTuber, an emerging job category. YouTubers are people who make a living with the advertisement revenue from the number of views of the videos that they post on YouTube as their main source of income. They became a hot topic in Japan in 2018, when they came in third in an annual survey of occupations that elementary schoolchildren wanted to take up when they grew up. The content and quality of the actions aside, this is an area that is becoming increasingly active in the digital revolution. An action society is emerging here.

Digital Capitalism & the Role of Japan

Finally, I would like to offer a few perspectives on the role that Japan is playing in the age of digital capitalism. As I stated at the beginning, I believe that the invisible value created by free digital services (consumer's surplus) is extremely large in Japan. Japanese businesses may be very slow to digitalize, but Japanese consumers are highly receptive to digital technology and generally like new services. In other words, Japan may play the global role of testing ground for new digital services. Hosting the 2020 Olympic Games in Tokyo will propel Japan in that direction.

Another major role that Japan is likely to play is as a global showcase for the different ways that digital technology can be used. It is widely believed in the developed countries in Europe and North America that machines and AI threaten to replace humanity, but Japan has a long history of using tools for extension and support of the human being. This is a technological culture that complements humans. Of course, it is not always appropriate to use technology to complement humanity. It will become necessary to use technology selectively for both replacement and support. It is my belief that the ways that digital technology is used in Japan will contribute to the search for that balance.

JS

Takeshi Mori is a senior researcher at the Nomura School of Advanced Management.

Interview with Dr. Tsuyoshi Abe, Senior Vice President & General Manager of the Marketing Headquarters, Yokogawa Electric Corporation

A VUCA World in Digital Society

By Japan SPOTLIGHT

Our key question in the Nov./Dec. 2018 issue is how digital technology, playing a key role in the Fourth Industrial Revolution, will affect the nature of our social economy. According to a distinguished IT engineer and business executive of Yokogawa Electric Corporation, Dr. Tsuyoshi Abe, digital society can be described as a “VUCA world” — that is, a world of Volatility, Uncertainty, Complexity and Ambiguity. How is it that digital society can be described as such? What are the key characteristics of this world? How well can Japanese businesses adjust their management style to this world?

In the following interview, Dr. Abe introduces this VUCA world based on his wide range of working experience in Intel and Yokogawa as senior vice president of the marketing headquarters with semiconductor and IT engineering expertise. We will apparently need knowledge of both engineering and natural sciences to survive in this digital society. Thus, the classical distinction between natural science departments and social science departments at universities could become meaningless.

(Interviewed on Aug. 30, 2018)

Introduction

JS: Could you please introduce yourself briefly?

Abe: I am the general manager of the Marketing Headquarters at Yokogawa Electric Corporation, the largest measurement and process automation equipment maker in Japan and the third-largest one in the world. Yokogawa has been a leading company in the area of process automation in industrial automation for a variety of production plant facilities, such as oil, gas/LNG, refinery, chemical, pulp/paper, power, food, medicine and so on, since we developed a distributed control system in 1975 as a pioneer. Over the life cycle of a plant facility, Yokogawa has been providing optimal solutions for the efficiency of the facility as well as its safety and security.

Our Marketing Headquarters is a bit different from those of other companies. We have 10 activities under our supervision (*Chart*), and this distinguishes us from others. The first one is to make mid-term or long-term business plans and monitor them. We announced a new mid- and long-term plan in May 2018. The second one is to



Dr. Tsuyoshi Abe

create new business. We are eager to develop a new business that we have never tried. Yokogawa was founded in 1915 as a measurement equipment maker but these past 40 years has been engaged in working on production and sales of control equipment for plant facilities to achieve process automation and design of control rooms. I believe we are now at a point to reconsider our business for the future. In line with this thinking, we founded amnimo Inc. in May 2018, a new company aiming to provide Industrial Internet of Things (IIoT) services that can be easily carried out by our customers. This company is 100% affiliated to the Marketing Headquarters, a non-profit center.

The third activity is marketing for the existing industrial automation or process automation business. The R&D center, named the innovation center, is also under

our supervision, which is unusual. Market communication, product branding, managing M&As and strategic alliances, activities related to patents and global standards are also subject to our command. Finally, industrial design is another activity supervised by us, which is very unique. I believe it is only Yokogawa in Japan that has so many business activities supervised by its Marketing Headquarters

CHART

Accountabilities of Yokogawa Marketing HQ



Source: Yokogawa Electric Corporation

and there are very few companies like us in the world.

I think these 10 business activities are all assets of marketing. We are now living in a so-called VUCA world where the key to surviving competition must be to make business decisions as quickly as possible. Considering that we must fail fast and fail forward in this volatile and uncertain business world today, our Marketing Headquarters must make decisions faster than environmental changes. It will probably be difficult to survive in a VUCA world unless even a factory makes a decision as quickly as the Marketing Headquarters does.

I had been working for Intel for 31 years and transferred to Yokogawa in 2016. I have knowledge about semiconductors and ICT industries thanks to my experience with Intel. When I became interested in working in other business areas like the energy industry and the biology industry, I got the chance to be transferred to Yokogawa.

The VUCA World

JS: VUCA world is a term describing digital society. Could you explain to us exactly what this means by showing us specific examples?

Abe: Yes. In recent years, the World Economic Forum's annual conference at Davos in Switzerland has always covered topics related to VUCA. This conference is an important venue for policy-oriented discussions among leading politicians, journalists, businessmen and academics worldwide. VUCA stands for Volatility, Uncertainty, Complexity and Ambiguity.

VUCA is what the law of increasing entropy in the second law of thermodynamics tells us about nature. Simply put, natural phenomena always move toward disorder and diffusion, according to this law. First, any natural phenomenon starts with stability, but as time goes by it becomes volatile and uncertain, and then cause-and-effect relations concerning this natural phenomenon will be ambiguous. Under these circumstances, there will be an increasing variety of responses to this phenomenon, because of this ambiguity. There will be many exogenous variables which could influence this phenomenon, and also many multiple interdependencies among these variables will be observed. This increased complexity leads to unpredictability about the future progress of the phenomenon. In the final stage, the ambiguity of the cause-and-effect relations of the phenomenon reach extremity, and because these relations remain completely unknown we cannot apply empirical deductions to achieve a solution. This law of nature must be applied to our social development today. As our society faces unprecedented large-scale changes, we cannot predict the future of any social phenomenon.

For example, in the recent US presidential election, Hillary Clinton won 64.2 million votes, while Donald Trump won 62.2 million votes. But Trump won more electors than Clinton did and became president. There were very few who predicted this outcome before counting ballots started.

Looking at a company's corporate value, in the taxi business Uber has the largest corporate value in the world, I believe. However, they do not own a single car. Likewise, Alibaba, with the largest sales channel in the world, has no stock of any shop item. Assuming that the largest media in the world now is Facebook, it has no contents of its own. Though Airbnb is supposed to be running the largest

accommodation-providing service in the world, it has no real estate. You can see that companies with no fixed costs have the larger corporate value. We have a limitless number of those examples.

I had been working in the semiconductor business while I was at Intel. In the 1970s, American firms were leading the business and in the 1980s Japanese firms like NEC, Fujitsu and Panasonic emerged as its frontrunners. However, after the 1980s, Korean firms like Samsung prospered and very few Japanese firms have survived the race until now. Thus we see changes in the leading companies in this domain very quickly. Prosperity and decline happened very rapidly.

There must be no other business area where such a speedy change among the principal players has happened every decade. In our VUCA world, such speedy changes have become the new normal and they occur now in many sectors. This is amazing and at the same time terrifying.

JS: Our manufacturing industry is not solid anymore. Is platform business replacing it?

Abe: Yes, it is. “Digitalization” or “digital transformation” is bringing about this situation. In digitalization, anybody can copy any product or technology. When the Japanese manufacturing industry was highly competitive, there was the Trinitron picture tube for television sets, which was a technology that made a clear and beautiful picture in color for TVs. Such technology, or any other, can be copied easily by anybody in our digital era. Thus, such new technology users would lose competitive advantage in a very short period. Under these circumstances, any technological competitiveness would be lost quickly and price would be the sole factor determining the winner of the competition. Any TV maker successful in selling the product at the cheapest price would dominate the market.

We have a hypothesis of an S-shaped curve concerning the life cycle of a product. A company is gaining profits when its products are on the upward trend of the curve. After that, arriving at the peak, it will be a mature industry. It took more than 33 years for the Trinitron picture tube to prevail in the market. As it expanded in the market slowly, the producer gained profits over a long time and this product assured the company of big profits. However, another more recent component of TV sets — the liquid crystal panel — had a steeper S-shaped curve and it could bring in profits for only 10 years. Such rapid change in best-selling goods is a major

characteristic of digitalization. Under such circumstances, any delay in management decisions could be fatal for earning profits, as the best market situation for a company will be over if management remains reluctant to make a decision on changing the principal products for sale. Such cases can be observed in many sectors in this VUCA world.

Rules of the Game in the Digital Economy

JS: The speed of digitalization is high and the regulations necessary for smooth operation of digital business are lagging behind the trends. For example, the European Union adopted General Data Protection Rules (GDPR) in May 2018 to try to meet the increasing need for privacy protection resulting from that enormous amount of private data being processed by digital technology. But it does not seem to be good enough to achieve the goal.

Abe: Yes, exactly. The GDPR is an attempt to deal with Complexity in the VUCA world. Another issue could be related to taxation in terms of the macro-economy. Our tax system seems to fail to deal with the increasing e-commerce emerging everywhere through digital transformation. Tax authorities have not found any countermeasures yet to collect tax from such e-commerce. They have not decided yet where to tax e-commerce — the venue of the server or the company’s headquarters. They cannot keep up with cyber business. Governments must be pressed to find a solution as quickly as possible.

The same is true of a company’s decision-making process. In Japan, changing business decisions too frequently was traditionally considered bad management. But today, a quick change of decision is considered good management. This is a big change in the decision-making process largely adopted by Japanese firms. PDCA (Plan-Do-Check-Action) is not working any longer. Japanese businesses have been fully tuned to raising the quality of a product by the PDCA process. However, PDCA cannot keep companies up with the rapid changes in market situations. Today another decision-making process has been adopted by some Japanese firms — OODA (Observe-Orient-Decide-Act). Under this process, more decision making is left to the factories or the shops working on the daily

business and facing the reality of the market directly. As a matter of fact, Yokogawa's mid- and long-term business plan adopted in 2018 recommended OODA, while also retaining PDCA. If we have the wrong plan at the starting point, then the PDCA process would produce the wrong outcome, in which case we would need OODA.

To achieve OODA, we would need a different team in our shops or factories. We would need a team of employees with a diversity of talents and expertise, like those portrayed in films like *Mission Impossible* or *The A Team*. Diversity is a key word. A team with the same kind of talents or capacities would not be able to achieve the desired outcomes. People with diverse talents and expertise at the business spots directly dealing with customers will need to observe, decide and act quickly.

JS: Consumers and producers have been considered separate entities. But from now on, will consumers need to participate in the business decision-making process to meet the needs of the market more quickly?

Abe: Yes. In our VUCA world, innovators are not the enterprises anymore. Since around the middle of the 2000s, end users in general have been considered innovators, due to the influence of digitalization, namely in this case the emergence of SNS. I would say at least 70% of innovators now are general end users. So it would be meaningless for a company to think about future business on its own. Corporations will need to collaborate with their customers even from the stage of R&D. So I believe R&D will be turned into C&D (Connect and Develop), meaning product development by collaboration between the corporation and the customers. Among the 25 projects running in parallel in my office, most of them are such C&D projects.

JS: It is often pointed out that Japanese companies today fail to create attractive products for customers and that Japan's stagnant economy is due not only to government policies but to Japanese business firms. But I guess many big Japanese companies are beginning to understand what the VUCA world means and are now prepared to produce goods that meet customers' needs.



Abe: Yes, that is true. They are successful in producing attractive goods. I think the big question for them is marketing. A good example is mobile phones. Japan has a population of over 120 million and the third-largest mobile phone market in the world, so Japanese companies can survive just by selling goods only in the Japanese market. Their first priority would be the Japanese market, while South Korea, for example, has a population of only 50 million and thus naturally targets a global market. Which market a company gives priority to would make a big difference between the sales strategies of the two nations' companies. In Southeast Asia, for example, there are many contagious diseases spread by mosquitoes, such as Zika fever or malaria. Both Japanese and Korean companies sell many air conditioners in Southeast Asia, but while Korean air conditioners are equipped with ultrasonic technology to ward off mosquitoes, Japanese ones do not have it. As Koreans target a global market as their first priority, they produce goods on the basis of an ethnological analysis of the nations overseas to understand the authentic needs of those countries. Japanese marketing strategy has not reached that stage yet.

There are of course some success cases for Japanese companies. For example, Panasonic's washing machines have won a good reputation in India. By sending their employees to live in India, they found that a sari, an Indian woman's traditional clothing, was easily damaged by existing washing machines. So they added a button for

washing a sari specifically to their washing machines for Indian customers, which won great support from Indian women.

Human Resources Needed for Digitalization

JS: What kind of talents among human resources will be needed in the age of digitalization?

Abe: I think there are five key elements necessary for human resources in this century as digitalization continues.

The first one is, needless to say, ICT literacy. You must be a master of a PC and smartphone, and in addition data literacy for analyzing statistical data would be desirable. The second one is communication capacity, including language capacity, as you may need to be active anywhere in the world. The third one is competency in collaboration — you will need the capacity to collaborate with diverse colleagues and partners. The fourth one is leadership. We will need leaders who can take initiatives in a transition period where no fixed values are dominant. Last but not least, creativity. As digitalization continues, robots and AI will replace human jobs to raising efficiency, so I believe that people will have to play a key role in creating new jobs.

Concerning Japan in particular, I think we should have more individuals with dual or triple degrees. Thus in the age of digitalization we will need intrapersonal skills, which are lacking in Japan. People with such skills will be much more creative in digitalization where the distinction between social science and natural science is blurred and an interdisciplinary approach would be productive.

JS: In order to achieve such human resources, will we need to reform the Japanese education system, and if so, how do you think we could change it?

Abe: It is difficult to change our education system. One thing I can clearly say is that we will have to change our working performance assessment system in companies. The current Japanese working performance assessment is based upon a zero-sum formula. If you fail to achieve your goal, you will get a negative assessment and vice versa. We should give up this system.

Instead, we should set high targets and even if we fail to achieve

them, any attempt to achieve them in this process would need to be assessed. We have very few methods of assessment. But it is often said that failure is the mother of success, so we will need to improve our assessment methods. Otherwise, we will not be able to realize large-scale innovations.

Mitigation of Income Inequality

JS: Income disparity is rapidly growing in all capitalist nations. Unless we mitigate it, capitalism may not be sustainable. In the digital society, we can see a rise in the sharing economy, for example Uber, which offers a taxi-sharing service. Would this mean less income inequality? Would it be considered a positive aspect of the digital society?

Abe: In my personal view, income disparity will not be mitigated but will even expand in the digital society. The authentic sense of “digital divide” will be literally “expanded income inequality”. However, I am not pessimistic about the future of the digital society. I think the basic philosophy of capitalism could be changed from an “egocentric” one to an “ecocentric” one. So many large enterprises are now pursuing the 17 Sustainable Development Goals (SDGs) announced by the United Nations in their next mid- and long-term business plans. Among those SDGs, inclusive growth (growth based on equality) and environmentally sustainable growth are included. Yokogawa is no exception. We have decided to pursue all of those goals. Of course, we are trying to earn money, but the money must be used for more ecocentric or altruistic purposes. **JS**

Written with the cooperation of Naoko Sakai who is a freelance writer.

Special Interview

Interview with Dr. Junhua Wu, Research Director & Chief Senior Economist of the Japan Research Institute

Struggle for Global Hegemony — Real Implications of the China-US Trade War

By Japan SPOTLIGHT

When China joined the World Trade Organization (WTO) in 2001, it was a symbolic development signifying a change in the progress of globalization. The perceived decline in US global leadership and the rising power of China are now in collision in the form of a trade war. This is a geopolitical crisis rather than an economic crisis, since a political and ideological confrontation from rivalry to be the largest superpower in the world lies behind the trade war. Therefore, conventional economic theory advocating for free trade and a market economy will not work well as a remedy. Both nations have their own structural backgrounds that have led to this stage and thus this trade war should be examined from a broader and historical perspective. In other words, it would be wrong to consider the US-China trade war as a transitory phenomenon.

We had a chance to interview an expert on China-US relations, Dr. Junhua Wu, research director and chief senior economist at the Japan Research Institute, a Tokyo-based think tank. She provided us with a structural and long-term perspective on this issue.

(Interviewed on Sept. 12, 2018)

Introduction

JS: Could you please introduce yourself briefly, and in particular your specialty?

Wu: I joined the Japan Research Institute in 1990 after finishing my studies at a graduate school. Then I was stationed overseas from 1995 until 2016, first in Hong Kong, then Shanghai and Washington, DC. In 2016, I came back to the headquarters in Tokyo. I started my professional career as an economist specializing in the Chinese economy, but since 2005 I have been looking at China from a wider perspective, including political aspects apart from economic aspects, and gradually expanding my interest towards the relationship between the United States and China. At this moment, my main focus is US-China relations.

The reason that I expanded my interests is that figuring out the direction of China has been my ultimate goal. I started my career as a China watcher right after the Tiananmen Square incident took place. At that time, I believed that the economy would be the key factor determining the future of China. That's why I became an economist. However, around 2005, I found that domestic politics would have more impact on China's future than the economy. So I expanded my interest to politics. Then, in the wake of the global



Dr. Junhua Wu

financial crisis, the relationship with the US developed into a crucial factor for China, and eventually US-China relations became one of my subjects.

Assessment of the Impact of Trade War Between China & US

JS: As an expert on US-China relations, how do you assess the global impact of the current US-China trade war as well as its impact upon both nations?

Wu: The current US-China trade war is not only the result of economic friction but can also be interpreted as the two nations' struggle for hegemony in the world, which

I called the Cold-Peace War. While there are certain similarities between the Cold-Peace War and the Cold War between the US and Soviet Union, it's not a simple copy of the Cold War. As we all know, during the Cold War era the two opposing sides were completely separated from each other — not only militarily but also politically and economically. Thus their interests did not overlap. By contrast, China and the US share common interests in many areas now and that makes the competition between the two countries much more complicated. That's why I put the word "peace" after "cold" to describe this feature of the current relationship of the US and China.

Special Interview

In 2015, when I was still in Washington, DC, I saw a significant momentum that transformed the people's recognition of China. Seeing China as a strategic rival to the US became not only the view of the so-called Dragon-Slayers but also many of the so-called Panda-Huggers. Although there have been growing economic and geopolitical interests between the US and China, many Americans realized that it's highly unlikely that a transformation of the political system will happen in China along with economic growth.

Moreover, as a result of engagement policy, which has been implemented for decades, China has developed to be the biggest if not the only challenger to US global hegemony, not only economically but also militarily and ideologically. Thus, I believe the trade war was not started because of the protectionist attitude of the current administration and President Donald Trump. It seems that it's the inevitable result of the manner of China's rising.

On the assumption that the above judgement is correct, it might be considered that starting such competition in the domain of the economy would be rational since a comprehensive ideological and military struggle for hegemony would cost much more for both nations and the rest of the world.

As the Chinese economy is a principal part of the global supply chain, it is certain that this trade war will have a significant impact on the global economy, including the Japanese economy. Given that the Chinese economy is currently not in perfect health, the negative impact of the trade war will be more significant from now on and have longer-term effects.

JS: There is a view of that there would be no significant impact from the trade war, such as a drastic decline in GDP growth. But you believe that a trade war will have significant negative impacts on the economy.

Wu: Yes, I believe a trade war with the US would cause China fundamental damage to its economy because its large trade surplus with the US has been built on the Chinese economic growth formula. It is indeed true that raising tariffs may not help the US economically. It is also true, however, that raising tariffs is a method that is most likely to function effectively, if not the only method for the US to make China listen to it, though I am not sure whether Trump himself is aware of it or not. In other words, in terms of competition for global hegemony, the current US trade policy may work in countervailing China because China's emerging has been particularly backed by its fast-growing economy.

There are two growing concerns about China. One is the way of China's economic development, which is widely called "party-state

capitalism". Some even worry if "market capitalism" can remain compatible with it. The other is the geopolitical impact of China's economic diplomacy, such as the "One Belt, One Road" initiative, the AIIB and significant aid provided to developing nations. Through these kinds of policy approaches China has enhanced its global influence. As is well known, China has been taking advantage of the WTO and gaining a huge trade surplus under the free trade regime supported by the WTO. This surplus is the source of the increased money supply that has enabled the Chinese government to enhance its investment for building up its infrastructures and eventually making its economy grow.

For decades, especially in the past 10 years, the trade surplus has played a major role in China's monetary easing. In China all foreign currency amounts must be converted into Chinese yuan. The trade surplus, which is the main source of capital inflows, has contributed to an increase of base money in the shape of "funds outstanding for foreign exchange" and most of China's trade surplus is with the US. For instance, this year, from January to August, the ratio of the trade surplus with the US to China's total trade surplus was 97%.

The Chinese trade surplus with the US is also a key to China's foreign currency reserves. Its cumulated trade surplus in goods and services with the US from 2001 until 2017 was \$4.1 trillion, while China's foreign currency reserves at maximum were \$3.9 trillion and are now \$3.1 trillion. Thus it is not too much to say that China's trade surplus with the US has made it possible for China to achieve investment-led economic growth and economic diplomacy.

There is a saying that there is no winner in a trade war. Probably, it's true. But it is also true that raising tariffs might be an effective lever to move the relationship between the US and China since the trade surplus with the US really matters to China's economy.

There is some concern that as a retaliatory measure China may sell US Treasuries. Yes, it might happen. For China, however, it's a double-edged sword because declines in US Treasury prices may also hurt China.

As I mentioned before, a trade war is only the first battle of comprehensive competition between the US and China. We are now standing at a critical historical turning point and thus we should look at the issue from a much broader and deeper perspective. The debate on the trade war and its possible economic consequences seems to be based upon a rather myopic viewpoint and too much engaged with only short-term aspects.

Possible Consequences of US-China Confrontation for North Korea

JS: This question might also be too myopic, but the US seems to be taking advantage of China's influence on North Korea to solve the issue of North Korea's denuclearization. Would this affect the US-China rivalry?

Wu: No, I don't think so. It's unlikely that the US would modify its tough policy against China for the sake of the complete denuclearization of North Korea. The issue of North Korea is certainly an important one for the peace of the Korean Peninsula, but it is of a different nature from the US-China competition. The two issues should not be compared.

JS: Will there be any compromises in the trade war between the two nations?

Wu: China probably will offer more promises, such as protecting Intellectual Property Rights, reducing tariffs, and so on. But I am not so optimistic that the dispute between the two nations can be solved by those kinds of compromise.

A Transitory Period of Capitalism

JS: Are we living in a completely new age where "state capitalism" represented by China and "market capitalism" represented by the US are now in friction?

Wu: I am not sure if "state capitalism" is the best term to describe the state of the Chinese economy. We are facing an unprecedented situation in many senses due to the manner of China's emergence. I cannot find yet the best terminology for the Chinese way of developing and governing the economy. About 10 years ago, I created the term "bureaucratic-made capitalism" to describe the process of China's economic development since 1978 but have to admit that is not the perfect expression. The reason is "bureaucratic-made capitalism" may well describe the manner of China's economic development, but it covers neither its outcome nor its ambition. A mixed approach of market function and absolute party control makes China different from other economies. It's difficult for a conventional approach based on market capitalism and the rule of law to compete. So, from the point of view of traditional economic theory, what the current US administration is doing is not correct but might be useful.

JS: Do you think this Chinese approach and the common capitalism approach could converge eventually?

Wu: Unfortunately, I don't think so.

JS: How can we build an ideal world, then, where China and all other nations can collaborate and live together safely?

Wu: I wish we could, but wonder if the idea of building an ideal world is realistic.

Global Governance in a New Age

JS: Under current international politics where US leadership in global governance is less expected, how do you think East Asian countries can contribute to global governance?

Wu: Before I answer your question, I would like to say that I am not so confident in the argument that the decline of US leadership will continue. But whether the decline of US leadership will continue or not, it is a reality that the US is no longer able to bear alone the costs for global governance. Given that, it's time for East Asian countries to realize that there is no free ride anymore. Two choices remain: one is to share a certain burden of the costs which have been mostly borne by the US, and the other is to collaborate with China, if they believe they can go along with it well.

JS: What do you think about the role of APEC in achieving better global governance?

Wu: I am not an expert on APEC but believe that any effort for better global governance is worth it.

JS: What if East Asian countries take advantage of Chinese initiatives such as the AIIB and "One Belt, One Road", which are part of China's attempts to contribute to global governance? They could exploit natural resources in cooperation with China for infrastructure projects in resource-rich countries in Central Asia, and could also meet the growing need for infrastructure in Asia not only by ADB finance but also by AIIB finance.

Special Interview

Wu: If East Asian countries are certain that the AIIB and “One Belt, One Road” are win-win games, then do it.

Questions of Trade & Trade Policy

JS: On the issue of trade policy, how do you think we can avoid serious outcomes from the trade war? Would the WTO or TPP11 work to mitigate trade friction in the short term?

Wu: I am not optimistic about the future of the WTO. It should have been reformed long ago. As I just mentioned when we talked about APEC, however, any effort for a better world is worth making. I really hope that the US, Japan and the European Union’s agreement on WTO reform can achieve certain results, though I wonder if any meaningful reform can be made under the WTO’s current “consensus” decision-making regime.

JS: How about the role of regional FTAs in mitigating trade friction? If the TPP11, RCEP, China-Japan-Korea FTA or EU-Japan FTA all work well in promoting free trade, the US would have to reconsider its trade policies, since US companies would lose the benefits of trade by being outside of those FTAs.

Wu: If those FTAs could work well without the US, all those member nations would probably not mind if the US joins them or not. They could enjoy the benefits of free trade without the US. The problem is, however, it’s still hard to image that all those free trade frameworks can make real sense without the US.

The nature of globalization was changed along with the ending of the Cold War. During the Cold War era, globalization could only be promoted partially, among countries such as the G7 nations. In other words, at that time globalization was promoted by countries sharing the same values, democracy, rule of law and of course, market capitalism. After the Cold War, however, globalization has been expanded to countries that include those who don’t share these values.

This is one of the most important reasons why the WTO dispute settlement mechanism has not worked well since this dispute settlement mechanism functions on the premise of belief in the rule of law. Now you can see why the credibility of the WTO has fallen in the past two decades. It is because, as a result of the expansion of globalization during the post-Cold War era, the precondition of the WTO dispute settlement mechanism practically collapsed. It takes a

long time for the WTO to reach a consensus in making a decision and in addition, the WTO has no certain effective methods to force all members, including members who don’t share these values, to comply with the rules.

Another notable consequence of post-Cold War globalization is the reversion of capitalism. For a long time, I thought that “capitalism” was not the proper word to describe the developed economies because capitalism had been evaluated on the basis of criticism by Karl Marx. I didn’t ask why but just took it for granted. Now I realize that the evaluation of capitalism during the Cold War era was a result of the progress of liberal democracy. In a world that was divided into East and West, the Western corporates had no choice but to adjust their management compliance with the progress of liberal democracy, such as protecting labor rights, environment friendly management, and so on, because it was impossible for them to move out from the West.

But in the post-Cold War era, corporates could move anywhere in the world seeking profits mainly based on so-called comparative advantage. As a result, local communities such as the “Rust Belt” region in the US began to collapse.

From the viewpoint of economic rationality, we must say that what these corporates have done is to respond appropriately to increasingly intense competition. In fact, as an economist, until recently I was a story advocate of globalization. Nonetheless, in the face of the degradation of local communities in the developed world and the reality that China, as the biggest beneficiary of post-Cold War globalization, has emerged to be a major challenger to democracy and the market economy, my confidence in globalization has been upset. A simple question is this: is profit all the value of corporate existence, especially at a time that we are approaching a historic turning point?

There is a phenomenon that any argument or policy that is different from or against what the corporates and people did during the post-Cold War era is protectionism or populism. Is this right? Ignoring fundamental changes in the undercurrent of globalization during the post-Cold War era and then advocating globalization as an absolute good is at least a kind of negligence of thinking.

Yes, our democracy is facing a crisis but we also must remember that, in a democracy, the common people’s views must be respected. It’s certain that democracy needs to be reformed. Nonetheless, we have no choice but to overcome all the distortions and problems of democracy because “Democracy is (still) the worst form of government, except for all the others.”

JS

Written with the assistance of TapeRewrite Corporation.

Roundtable by Long Ke, Muneo Kurauchi, Prof. Kazuyuki Motohashi & Prof. Mariko Watanabe

R oundtable Discussion on the Chinese Economy — Opportunities & Challenges

By Japan SPOTLIGHT

METI's White Paper on International Economy & Trade 2018 highlighted the Chinese economy as a key to global economic development and Japanese economic prosperity against the background of the growing digital economy in which the Chinese digital industry is playing a pivotal role.

Japan SPOTLIGHT, in highlighting this White Paper 2018 in the cover story of the Sept./Oct. 2018 issue, organized a roundtable discussion on the current state and future of the Chinese economy by distinguished experts.

Prof. Kazuyuki Motohashi, professor at the University of Tokyo's School of Engineering, is an expert on econometrics who is working on an econometric analysis on Chinese innovation capacity. Muneo Kurauchi, advisor to MUFG Bank, Ltd, has been chairman of the Policy Sub-Committee of the Committee on China of Keidanren (Japan Business Federation) for the past five years. Since 1995 he has watched developments in China as a leading banker responsible for business and strategy there. Prof. Mariko Watanabe, professor at the Faculty of Economics, Gakushuin University, has been an expert on the Chinese economy since she started her research on it as a researcher at the Institute of Developing Economies in Japan, focusing on institutional changes, business strategy and industrial organization. She studied at the University of Hong Kong (1996-98) and Peking University (2006-2008), and has conducted research on Chinese firms and industrial organizations to discover the institutional background of China's high economic growth. Long Ke, a senior fellow at the Tokyo Foundation for Policy Research, is one of our editorial committee members and one of the most well-known Chinese economists, and has been working on Chinese political economy for many years.

(Roundtable on Aug. 2, 2018)

Participants



Long Ke



Muneo Kurauchi



Prof. Kazuyuki Motohashi



Prof. Mariko Watanabe

Chinese Macroeconomy in 2018

JS: First of all, we are all interested in the issue of the Chinese economy in 2018. Mr. Ke, could you please present your view on it?

Ke: Yes. What is notable about the Chinese economy in 2018 is how it underwent structural reform. The Chinese business model that took advantage of cheap labor costs does not work anymore, as labor costs

keeps rising. While China's digital economy, which is the so-called new economy, has been doing well, one of the key questions about the Chinese economy is how it can restore the old economy suffering from rising labor costs. But as for new economy, looking at the consequences of the US ban on transactions by the government, industry and military for national security reasons involving the products of ZTE, this Chinese high-tech company has been forced to stop production because of this policy, and thus their technological base is not well consolidated. Technology seems to be a bottleneck in

enhancing the value-added of the Chinese industrial structure. Another concern is the gap in science capacity between China and developed nations. It would be easier to catch up with the advanced technologies in developed nations, but it will be difficult to fill in the science capacity gap. In China, the ability to create new technology is limited due to this lack of science capacity and the weakness of incentives to develop science.

Looking at the Chinese macroeconomy in 2018, consumption growth is not expected to be high but will not be too disappointing. A key structural problem for Chinese consumption growth will be the widening income inequality and the lack of a well-established social security system, such as insurance for caregiving in a rapidly aging society. This is because Chinese consumption growth is not explosive.

Business firms' investment cannot be expected to be high, since business firms in particular in the old economy are suffering from excess capacity in production facilities. The Chinese government has thus recently announced new business cycle countermeasures to stimulate the economy, consisting mainly of an active fiscal policy oriented towards public infrastructure investment. However, their high-speed railways and highways are already well established, as are their port and airport facilities. So there does not seem to be any significant need for public infrastructures at this moment.

Another growth engine, trade, is to be seen as rather negative. Even before the trade war between the United States and China started, Chinese export growth had been negative in 2015 and 2016 due to rising labor costs. President Donald Trump's protectionist trade policy initiative further accelerated this downtrend in trade. In the light of this negative prospect for trade, China announced an active fiscal policy to avoid a possible recession in the second half of 2018 and 2019. From all this, I have a rather pessimistic view on the Chinese economy in 2018.

Watanabe: The Chinese government clearly recognized the existence of excess production capacity in the following five industrial sectors — steel, cement, aluminum, oil refinery and paper & pulp. In particular, in the steel sector the government has been actively enforcing the reduction of excess capacity as it announced and committed to at the Global Forum on Steel Excess Capacity Ministerial meeting, an international surveillance mechanism for excess capacity. It is also reported that growth of investment by state-owned enterprises shrank drastically in 2018 and investment growth in total is lower than GDP as a whole. This has happened for the first time in the era of reform. It is uncertain whether the supply side reform will definitely lead to an economic slowdown, now that consumption has become a substantial part of the macro economy. The new economy in urban areas is robust and the expanded middle class will support the stable growth of consumption more strongly than one or two decades ago. Thus, the Chinese economy could grow steadily even without investment growth.

JS: Is there any possibility of excess production capacity rising in any other industrial sector?

Watanabe: Yes. The excess production capacity issue could rise in the sectors where a policy framework exists to preserve firms in the

business, even though they are losing competitiveness and there is no economic rationale for them to be kept in the market. This could cause a serious impediment to the economy. Another issue is that it is often pointed out today that the semiconductor industry in China has been too greatly subsidized and is thus suffering from excess production capacity. Insofar as the Chinese government invests into state-owned enterprises in the semiconductor industry, that industry's production will be controlled by the government and there would not be excess production, even though part of its production capacity could be wasteful.

On my first point, I think whether fair competition based on a level playing field is to be implemented or not would be an important criterion to judge if this subsidizing can be justified. However, whether there is excess capacity or not will also depend on whether China can beat the international competition. As Chinese companies become more competitive, it will be difficult to define those capacities as excessive.

JS: What about Mr. Ke's view on Chinese exports today? In his view, the US-China trade war could worsen the declining trend in Chinese exports and 2019 will be a year when the Chinese economy falls into serious difficulty. Do you all agree with him?

Kurauchi: Depending on the outcome of the trade war between China and the US, it is certainly true that the Chinese economy could be seriously damaged. I guess Trump will maintain his aggressive policy against China until the US mid-term elections in November to boost the Republicans' chances of winning. But after the elections, I think there will be a change of policy, since neither China nor the US will really want to continue the trade war seriously. I am not so pessimistic about the prospects. On behalf of the Japanese business world, I hope for stable economic policy management in China, as more than 30,000 Japanese business bases are active there now. The business performances of the headquarters in Japan will be seriously affected by their arms in China. I believe that the Chinese government is capable of managing the economy well for its stabilization and thus the trade war will find a way for a soft landing.

Innovation in China

JS: China's political stability must be a key to achieving such good governance of the economy. The capacity for innovation is another important issue in thinking about the long-term prospects for the Chinese economy. Let's talk about Chinese technology.

Ke: It is surprising to see that 67% of Chinese exports of semiconductors in business-to-business (B2B) transactions are from non-Chinese affiliated companies in China, according to trade statistics. In the light of this reality, I guess Chinese firms are not technologically competitive enough, though sales of semiconductors in business-to-customer (B2C) transactions are enormous due to the fact that in China there are 800 million Internet users.

COVER STORY 2

JS: Prof. Watanabe, what do you think are the main characteristics of Chinese innovation? In what sector is innovation rising? What do you think are the advantages and disadvantages of the Chinese economic and industrial system in starting innovation compared with other nations? How do you think Chinese innovation will evolve in the future?

Watanabe: Wherever you may be, today you will find that data is a key asset for innovation. The firms with affluent data are overwhelmingly competitive and can lead innovation. In this regard, Google and Facebook are the frontrunners but Alibaba and Tencent, both Chinese companies, are competing with them and have overwhelmed them in some particular fields. For example, Tencent is very successful in operating Internet banking for consumers. It has controlled bad or irrecoverable debt at surprisingly low levels and made profits due to this efficiency. It computed the risks of borrowers more accurately based on rich data from QQ or WeChat. Thus, it is so important to manage data well to achieve innovation today, not only in China but anywhere else.

Open networks of transaction, product and innovation are the key organizational characteristics of China. This openness offers extensive access to the new disruptive technology. The more open, the more users and suppliers are coming in, and this has accelerated new encounters and innovation. This is a good environment for “disruptive innovation” as defined by Clayton Christensen. This organizational competence has accelerated innovation in Shenzhen and elsewhere. The openness means the rapid spread of technology and homogenous competition; the players are forced to innovate new benefits so as to survive.

In the future, China must get into a stage to implement another type of innovation also mentioned by Christensen: “sustainable innovation” where it is accumulating competencies and raising the level of its technologies by itself. It has already appeared in China. For example, Huawei, an information technology company which has already started to design and produce semiconductor chips, has already reached this stage. The quality of its chips is already next to the top runner in the US.

In the domain of AI, Chinese researchers are literally the frontrunners. Their papers outnumber Japanese researchers’ ones. Meanwhile, open innovation-based industrial organization in China survives and by taking advantage of it China will have good potential to begin further innovations. Shenzhen and Hangzhou are the places where you can find such open innovations.

China certainly seems to be rather behind Japan in the domain of fine-tuning technology in which the Japanese excel. However, I think China will catch up with Japan soon in this domain as well. There will be very little the Japanese do that the Chinese will be unable to do. As the Chinese population outnumbers the Japanese, their competitiveness is expanding in every domain.

JS: What do you think about science in China? Do you agree with Mr. Ke?

Watanabe: It depends on the domain. AI, for example, I believe is the domain of science where researchers and business are collaborating, and in this domain Chinese scientists have a strong presence in the world. I am not quite sure, in this light, whether you can say that Chinese science is not competent.

Kurauchi: They may be weak in science but they are very competent in turning the seeds of technology into business and winning money. Chinese Internet facilities like Tencent or WeChat have achieved great business success by using Big Data. Such Chinese companies are also facing serious competition in the market, but this may enhance their competitiveness further.

Motohashi: I have a different view on Chinese science from Mr. Ke. Chinese universities’ science research papers not only outnumber Japanese ones but are also higher in quality, in that they outnumber Japanese papers among the top 1% of the Highly Cited Papers worldwide. The background of this outstanding academic performance by Chinese scientists is, in my view, their internationalization at a significant speed. In Chinese universities, many Chinese-speaking American researchers are visiting their Chinese colleagues and talking with them in Chinese. The Chinese government also encourages Chinese academics educated overseas to mediate between American or European academics and Chinese academics. The Chinese Education Ministry is also spending a large amount of its budget on raising the academic level of science.

On technology, although 10 years ago many Chinese patent applications were not necessarily well qualified, their scale of business and human resources has been instrumental in raising the quality. With the significant internationalization of business as well, their performance is outstanding and clearly Chinese technology is catching up with Japanese and others. In sectors like telecommunications equipment or electronics, their research costs are rather high and non-Chinese firms’ subsidiaries in China are the main exporters of these products to the overseas market, but today the percentage of those non-Chinese exporters is decreasing. In contrast to this, in the automobiles sector, this percentage is still high. Thus I see the Chinese auto industry’s competitiveness as not so strong, and probably not so strong either in sectors like materials and robots.

It is certainly true that Chinese Internet business companies like Baidu, Alibaba and Tencent are showing outstanding performances. For example, Google and Baidu are the only companies in the world with the Level 4 technology for driverless cars which would enable a driverless car to work perfectly in some specific places. You would need a map in order to enable it. Baidu owns a map of the whole Chinese continent and so Google cannot do the business of a driverless car in China. Such a map is devised by data that is the product of engineering rather than science. However, the data can be used only in China. This is true of other business transactions including finance for consumers.

JS: Prof. Motohashi, could you please elaborate on the cultural and business background to the emergence of those creative digital technology companies in China, such as Alibaba and Tencent, compared with Japan?

Motohashi: One striking difference from Japan is that in China there has been no credit card use for payments. Therefore, for e-commerce there is no way of paying without using cash but Fintech. Another thing is that those digital platforms have created financial instruments for the management of their clients' savings. Their offered interest rate was much higher than the market interest rate. So they have been successful in attracting large sums of money. Another thing to have pushed this platform business is that they adopted a method to identify individuals by just reading QR codes without using a specific PC with high security. Now wherever you go, you can use a QR code as your identity. The digital platform companies like Alibaba have been successful in creating trust on a nationwide scale, having expanded trust among relatives and family members in their traditional culture to a much wider scope of human relations through this easy way of personal identification.

Another Chinese tradition that has helped promote the digital platform business is one that allows people to be generous about experimentation. They do not mind so much about details in the business. For example, a QR code is good enough for identifying individuals and very few worry about the other means to ensure security, which is significantly different from Japanese culture. I guess those are the reasons why the digital platform business is prosperous in China.

JS: Mr. Kurauchi, could you please tell us how our Japanese companies can become involved in this Chinese digital business or in the digital market overall?

Kurauchi: The key question on our bankers' side would be how much information must be protected. In the case of China, even in buying an express train ticket, personal data would be revealed. Can we Japanese accept such a disclosure of private information? I am afraid we cannot.

Another concern is that payment by Fintech is almost monopolized by the two digital payment services, WeChat and Alipay, in China and so there are much fewer alternatives for payment than in Japan. I am afraid this may prevent Chinese society from being an authentic affluent society where people can enjoy many alternatives. I do not think Japanese society would go in the same direction as Chinese society, though the latter may be more efficient.

On the other hand, Japanese banks are now studying a variety of Fintech payment and settlement frameworks in order to ride this global trend.

Motohashi: IT and financial services are today interacting with each other closely. Financial institutes employ many AI experts. Digital financial services are also employing financial experts from the banks and thus they are pursuing a mixed industry of IT and finance. This is a supply-side story.

On the demand side of this business, it is necessary to make a distinction between business in Japan and business in China. In order to do business in China, you would have to be a Chinese company by acquiring capital in a Chinese company. You would have to observe a Chinese law prohibiting people from bringing out their acquired data from China. Meanwhile in Japan, Japanese banks are not adopting the



services provided by Alipay or WeChat.

Kurauchi: Payment and settlement are core and legacy businesses for Japanese banks. I think there must be a risk in leaving those businesses with Chinese financial IT services. As such, there are obstacles for Japanese banks in introducing a cashless financial system like in China. However, we would need to transform our financial system to catch up with the innovation in the digital market.

Ke: On the issue of driverless cars that Prof. Motohashi mentioned, Baidu bought a map from the Chinese military forces that would be crucial to national security. It is impossible for any non-Chinese company to get this map and they cannot get into the Chinese market for driverless cars.

On the question of the business and cultural background of Japan behind its lack of capacity to create a competitive digital platform business model like those created by Alibaba and Tencent, I guess there are three reasons for this. First, there are so many system engineers in Japan who know about technology but have no business mentality. Second, whenever Japanese try to do anything new, they start thinking about rules first. However, this digital world is a new economy and there have never been any rules in it. Whereas Alibaba and Tencent propose possible rules while they are actually engaged in the business, Japanese wait for rules to be adopted by the government. Third, Japanese firms have a strong sense of business territory. So there is no single Japanese company owning the data of 80 million inhabitants out of the total Japanese population of 127 million people. Meanwhile, digital platform companies like Alibaba and Tencent in China are creating only business models and not unique technology. The technology is provided by other nations.

In China, they can introduce a driverless car, but they cannot fully introduce electric cars. In 2017, 2.9 million cars were produced in China and the percentage of electric cars to total auto production was only 2-3%. Even those produced electric cars were for taxis or buses rather than vehicles for individual use. Why won't Chinese consumers buy electric cars for their households? Because the batteries in the cars are weak in terms of durability and safety. This is how, I believe, Chinese science capacity is truly limited.

If we define science as learning derived from a university's Department of Science or Department of Medical Science, such as

COVER STORY 2

studies in biochemistry or cells, there are very few Chinese students studying these things in US universities among the 300,000 Chinese studying in US universities in total. We have the largest number of Chinese students in business schools and the second largest in computer science schools. This is because they believe that studying science would not be helpful in earning money. So I think it would be a misunderstanding to exaggerate Chinese economic supremacy. They clearly have a weakness in innovation capacity.

Electric cars produced by BYD, a Chinese automobile company, cannot run longer than 100 kilometers unless they are equipped with so many batteries. With many batteries, their fuel consumption efficiency would be significantly worsened. This means in the old economy like the auto sector, Chinese innovation has not achieved a good performance. There is still a large technology gap between Chinese automakers and German, Japanese and American ones. Their labor force with technology skills is not well developed yet.

In the steel sector, there is the largest generator producer, Dongfang Electric, in China. Though their generators are of high quality, their important materials, such as special steel, are all imported from Japan, since all special steel made in China is not qualified. In shipbuilding, its core part, engines are also all imported from overseas.

It is certainly true that in the new economy where no legacy is necessary in promoting business, China has strength. This is because it has 800 million data users controlled by the government with all of their IDs. But this strength remains all inside the Chinese border.

Trade & Investment Issues

JS: Let's move to the questions of trade and investment. Mr. Ke, could you please give us your view on the prospects for the US-China trade war?

Ke: Trump has started a trade war with the US mid-term elections in November 2018 in mind. I have heard from US sources that he wanted to fight against China exhaustively, bearing in mind that President Ronald Reagan brought about the collapse of the Soviet Union in the 1990s. He wants to leave a legacy in history like Reagan by causing Chinese socialism, the last surviving such regime in the world, to collapse.

On the other hand, in spite of the trade war, there have been no riots attempting to attack American symbols in China such as Walmart, Starbucks or GM so far, though in past international conflicts with Japan or European nations their supermarkets or coffee shops or automobiles were destroyed by Chinese mobs. It can be understood that the Chinese government is preventing riots, being afraid of further US reaction. In this light, I think China will seek a solution for a soft landing from this trade war. Deputy Chairman of the Chinese Communist Party Wang Qishan will be a key person in achieving this. He may propose to the US government a menu of Chinese economic reforms including opening markets or reduction of excess production facilities. A compromise between the two would depend on how Trump values the menu. I think there would be a further negative impact upon the Chinese economy at this stage if China sticks to aggressive retaliation against the US protectionist policy. Of course, this trade war could work in favor of the Chinese economy, if China starts reforming

seriously by taking advantage of this pressure from the US as a possible positive development. The Chinese economy could enjoy higher growth with this, while structural economic reform in China has been slowing down.

Kurauchi: After the US mid-term elections, if the Americans find that they have to buy more expensive goods from China due to higher tariffs imposed by the US government and that their benefits from tax cuts would be offset by paying for those higher tariffs, they could have a negative reaction to Trump's protectionism. This might be another possibility for a soft landing.

China-Japan Business Relations

JS: Mr. Kurauchi, could you give us your thoughts on the possible opportunities for Japanese businesses in China and also the challenges for them in the Chinese market, including the issue of investment climate? What market do you in particular believe has high potential in China?

Kurauchi: The Chinese economy is now as important as the US for Japanese business in terms of scale, growth potential and global business strategy. In 2017, Japanese exports to China reached around 15 trillion yen, nearly equal to those to the US. Recently, as Chinese tourists in Japan are increasing, e-commerce beyond borders is also increasing to reflect the growth in demand for Japanese consumer goods. The Chinese government is also working on import promotion today and Japanese companies are trying to take advantage of this initiative.

On FDI, according to annual surveys by the Japan Bank for International Cooperation (JBIC), the top-ranked destination for FDI by Japanese companies within the next two to three years had been India since 2012, though it used to be China before that. However, China became the top-ranked destination again according to their most recent survey published in November 2017. This means that Japanese companies have acknowledged again that the size and growth potential of the Chinese market is still attractive and important in the medium run. A JETRO review also clarified that half of their surveyed Japanese companies were planning to expand their business in China in one or two years by reinforcing sales functions or increasing production of high-value added goods.

METI's White Paper 2018 mentioned that the sales figure of personal services-related companies from Japan to China was lower than those of US or European nations. Western big names like Starbucks, IKEA and ZARA have subsidiaries in China and they are enjoying their business. In contrast, Japanese service industries' presence is still limited in China. We understand that there exists enough space for Japanese companies to go into expanding service/consumer-related business in China. Of course we know that it is not that easy to win the competition there.

On the question of Chinese firms to invest in, healthcare, caregiving and medical services were mentioned as a potentially high growth sector on the occasion of Chinese Prime Minister Li Keqiang's visit to Japan in May 2018. Those services are the core of the Chinese

government's policy to promote national health. Those services are also ones where Japanese business can be fairly competitive against US and European firms in terms of providing safety, soundness and trust. This area could be a potential opportunity for Japanese business, I believe.

As for the business climate, rising labor costs, tough competition, non-transparency in implementation of laws, insufficient protection of intellectual property rights, and regulations on foreign exchanges and remittances are expected to remain the issues as before. The Chinese government is strengthening its regulations on the environment and it will be a challenge for Japanese business. The Japanese Chamber of Commerce in China in its annual white paper published in June 2018 made three requests to the Chinese government for economic reforms. The first is to correct a commercial system that prevents fair competition and achieve equality between Chinese and non-Chinese companies. The second is further elaboration of administrative reforms such as simplification and speeding up of government procedures, achieving a common interpretation in implementing laws and providing private businesses with sufficient time for adjustment to changed rules and regulations. The third is further modification of entry regulations for non-Chinese companies into the manufacturing and service sectors in China.

I believe we should keep requesting the Chinese government and they may continue to respond to our requests in our favor, such as lowering social insurance fees and revising the list of non-Chinese companies for market entry under administrative surveillance.

JS: A prolonged trade war between the US and China will seriously harm supply chain networks. Would this be Japanese business people's biggest concern?

Kurauchi: Yes, it is one of our concerns. Stable management of the Chinese economy will be most important for Japanese businesses to work in China. The US-China trade war could also affect Japanese intermediary goods production through supply chains by way of exports from China to the US. In this regard, we hope trade friction will find a way for a soft landing soon.

JS: What do you think about the possibility of collaboration between Chinese firms and Japanese firms in third countries, such as Central Asian countries or African nations?

Kurauchi: While China promotes its "One Belt, One Road" initiative, Japan is promoting a free and open Indo-Pacific strategy and there must be some duplication between these two. We will need to pursue collaboration with transparency, openness, economic efficiency and the fiscal health of the third country as the basic principles of cooperation. Based on these principles, two platforms were established as well for collaboration on the occasion of Premier Li's visit to Japan in May. One is the committee for the promotion of business cooperation between Japan and China in third countries, to be led by the governments with participation from the private sector, and the other is the Japan-China Forum on Third Country Business

Cooperation, to be attended by a wide range of companies and relevant ministers.

Japanese companies are interested in cooperation with Chinese companies in Africa, the Middle East and the Commonwealth of Independent States (CIS). I believe that Japan's participation in deals will increase the transparency of the project and it must be welcomed by all concerned parties. However, there are various types of risks which might challenge business viability. Another issue is finance. For collaboration, we need to adjust and build the framework quickly as there is a difference in the lending policies between the JBIC and Chinese policy banks, such as the China Development Bank and the Export-Import Bank of China. I hope we find solutions to these issues in the intergovernmental discussions with the private sector's cooperation.

Final Remarks

Watanabe: The key message from Japan to the world must be commitment to maintaining a free and fair world trade system. The White Paper 2018 clearly declares this point. I think the Japanese government needs to keep on communicating this message. The government must carry out two tasks. First, it is important to take advantage of the existing rules and policy measures to achieve a free and fair world trade system. For example, we should work on elaborating a policy recommendation on the competitive neutrality problem and subsidy issues under the WTO framework. Active implementation and utilization of institutions under the current WTO/ FTA framework is desirable. Particularly in East Asia, although the investment agreement clearly provides a scheme of intergovernmental communication, it is very rare for the member governments to use this clause for communication, even if any of the member governments' actions allegedly violate the interests of foreign investors, due to diplomatic reasons. For example, the Lotte group of South Korea was forced to close its supermarket business in China in 2017. The incident was allegedly related to the placement of the THAAD anti-missile defense system by the South Korea government, as the group agreed to sell its real estate for the site in South Korea. Consequently, it was reported that the Chinese government ordered the closure of 112 supermarket stores in China due to inadequate fire protection facilities. This issue should have been addressed by the existing investment treaty among Japan, China and South Korea. In this treaty, private business can require the government to look into possible cases where competition between domestic firms and foreign subsidiaries in the host country could be distorted by politics. But no action was taken by either South Korea or Japan.

The other task is building new institutions for adapting to this new environment — new issues like data protection or the implementation of competition law in which we have not yet had any harmonized rules. We will need to work on international harmonization of rules for those issues.

Motohashi: I agree with Prof. Watanabe. Japan should make clear its stance of fully supporting the WTO system, and strongly oppose Trump's protectionist policies.

JS

Written with the assistance of TapeRewrite Corporation.

Interview with Dr. Vinod K. Aggarwal, Travers Family Senior Faculty Fellow and Professor of Political Science & Director of the Berkeley APEC Study Center (BASC) at the University of California, Berkeley

U S-China Rivalry: Implications for East Asia

By Japan SPOTLIGHT

With an apparent decline in US leadership and an increase in political rivalry between China and the United States in Asia, East Asian nations are expected to play new roles as they face more volatility in the region, both economically and politically. Japan SPOTLIGHT interviewed Dr. Vinod Aggarwal, Travers Family senior faculty fellow and professor of political science, and director of the Berkeley APEC Study Center at the University of California, Berkeley, to discuss how political-structural issues in the US could make the East Asian political economy more volatile and complex. Is there room for optimism about the future roles of East Asian nations in global governance and how can they use their soft power for economic cooperation?

(Interviewed on Oct. 15, 2018)

Declining US Leadership

JS: The US seems to find it difficult to play a leading role in global governance today, due to its economic structural problems. How do you assess this decline in US leadership in global governance? Is it temporary or structural?

Aggarwal: In my view, this is a political structural problem, which in some ways is more important than an economic structural problem. By that I mean that there is a sharp divide in the US between those who support an isolationist policy and those who are more internationally oriented. I think that we see this in the transition from the Obama administration to the Trump administration. Part of the Republican Party is very isolationist, and part of the Democratic Party is also isolationist, and unfortunately the US bipartisan consensus has eroded over time. I think that this is more of a fundamental problem than US leadership. Although I think the US economy is still strong and going well, it faces several unresolved issues, such as the failure to have real structural adjustment to address changes in the global economy. The US has failed to bolster job transition, education at the lower levels is not as strong as it used to be, and I think that the lack of the ability to adjust the economy to the changing global system has led to unhappiness in various parts of the US. These problems help to explain why



Dr. Vinod K. Aggarwal

someone like Donald Trump has emerged. As a consequence, I think populism will last on and off for a decade – but not forever. I don't see that the political problem will be resolved very easily and we might see some alternation between an outward-looking US and an inward-looking US, which of course is not very good because it does not provide stability for the US in its engagement with international institutions.

JS: How do you think this structural problem in the US economy can be resolved?

Aggarwal: It's not just an economic problem, it's a political problem. There's no simple political solution, and ironically a political solution is more difficult than an economic solution. The US is still an extremely strong and dynamic economy with a strong stock market. So I don't think there's a fundamental economic problem with the US economy, but I think there is a fundamental problem with growing inequality, which has led to a lot of people feeling like they have been left by the wayside due to globalization. I think the real issue is whether we can move to some kind of political consensus on helping the US to adapt to the global economy. Unfortunately, I don't see any quick solution to this at this juncture.

US-China Political Rivalry

JS: Will the US-China trade war be a short-term problem or will it continue for many years and become an economic and cultural war?

Aggarwal: I am not sure that a cultural war would develop. I think this is really a political and economic issue, and if you look at the Trump administration, advisors like Peter Navarro have made it very clear that they would like to – in my view – create a bipolar world similar to the Soviet Union-US relationship, which means there will be little trade between the US and China and relatively less investment between the two countries. We would then see countries aligning with either the US or China, and I think that China for its part is taking the initiative to develop a system based on its own economy. If you look at the kind of tariffs that we've seen – \$250 billion – I don't think they are going to go away anytime soon because it's not clear what the Chinese could do to make the Americans happy in the short run. The US has said it would like to see an elimination of China's "Made in 2025" industrial policy, but the Chinese show no inclination to do so because their whole development strategy has been based on aggressive industrial policy. I think that most economists are naive and fail to understand that the Chinese have been very successful in their industrial policy, and so in that sense Navarro is right that the Chinese have used their industrial policy successfully, just as the Japanese and the Koreans used industrial policy after the end of World War II. The difference is that when the Japanese and Koreans used industrial policy, they were both allies of the US, and were dependent on American security. As a result, the US could pressure both South Korea and Japan when the government faced domestic protectionist lobbying, but it's much less capable of doing that with China because it is not an ally or dependent on the US for its security. When people compare US-Japan and US-South Korea and US-China relations, they fail to understand the context in which US-China relations exist. The US and China are peer competitors in geopolitics, and not just the economic realm, and therefore the Chinese have no interest in getting rid of their industrial policy.

JS: The US and China are political rivals in the security system. Does this mean that this trade war is to be interpreted not as a simple economic conflict, but a competition for political hegemony in the world?

Aggarwal: Yes, I think that is the way the Trump administration sees it: the more we have trade and investment with China and the more

the Chinese use various policies to get technology from the US, Europeans and other countries, the more it gives them a geopolitical advantage. The Chinese have been using their growing military capabilities to be more aggressive in the East and South China Seas, and the Americans are now very concerned about this kind of "technology-based Cold War". One American response has been the passage of FIRRMA – the Foreign Investment Risk Review Modernization Act – that will enhance the review process of the Committee of Foreign Investment of the US. I think that the US remains skeptical about some of the Chinese investment coming in, because they view it as Chinese companies coming in and trying to take American technology. Whether that is true or not, that is the view of the Trump administration. In that sense, my prediction is the US-China trade tension will continue for a while.

JS: On the issue of a US-China technology-based Cold War, do you think security risks form the main perspective in thinking about future risks to trade and investment?

Aggarwal: I think that what the Trump administration is trying to do – and the Department of Defense has just issued a planning document in September 2018 called "Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain Resiliency of the United States" – is to argue that the US supply chain has lots of vulnerabilities, including its reliance on foreign firms. These vulnerabilities mean that we are reliant on China and other countries that are not friendly to the US. In this way, they are trying to frame the debate in a way that makes it look like we need to decrease trade and investment with a lot of these countries because of security risks. The problem I see is that it is very popular to look at every import or investment as a security risk and I think that what that leads to is a lot of American firms seeking protection, claiming that there is a security risk where there isn't one. So I think that the danger is that all imports will be seen to be a security risk. In the 1950s, for example, the woolen blanket industry argued that the US had too much dependence on Japan as a supplier because woolen blankets would be needed to protect people against radiation in case of an atomic war! I think there is also a kind of false framing of security when it comes to trade and investment. It is very likely that while there are some important security risks in some parts of trade and investment. I don't think that for basic steel, for example, there are many security risks given that there are many suppliers of steel outside of China. One could argue that much of the trade war is really a domestic protectionist effort on the part of American firms.

JS: In my understanding, no international rules body

like the WTO or regional free trade agreements have mentioned security risks. From now on, do you think trade negotiations for international treaties will touch on the issue of security risks much more?

Aggarwal: That's not accurate because the GATT already had a provision for national security risks (Article XXI). There are generally provisions for national security in trade agreements so I don't think that is new. What is new is that the US and possibly other countries will use the security argument to get protection, to avoid retaliation, and to basically maneuver around the rules of the WTO by saying that all of these things are security issues and not just economic issues. In simple terms, there is a reframing of import competition as security competition.

JS: You mentioned that the US has become concerned about Chinese or other countries' investment in the US usurping the industrial or technological base of the US. Has that concern resulted in a significant decrease in US internal FDI in 2017?

Aggarwal: I think that it's difficult to attribute the decline in investment in the US to these new rules because there was also a decline from 2016 to 2017. Inward foreign investment into the US was \$146 billion in 2016, and in the first quarter of 2017 it was \$90 billion, and this was when Trump was just elected. So I don't think we can attribute all of this to Trump's policies. Over the long run, if there is growing anti-globalization sentiment then we will see less FDI. But looking at any one year-to-year decline of \$51 billion and immediately claiming that this is a transformation of the global economy and that investment is stopping is not good analysis. It is also worth remembering that the rules have really gone into effect immediately, and have not blocked large amounts of investment. These developments are also complicated by new tax laws and concerns about Chinese investing more in Asia, so I don't think we can attribute all of this to anti-globalization.

Role of East Asia in Mitigating Trade Wars

JS: On the economic side, given increased interdependencies among nations, the policy implications of protectionism by big countries like the US and China would be enormous. Assuming this friction continues, how can we mitigate this negative impact?

Aggarwal: That is right to some extent, but I think that this is really

an issue for countries that are middle powers like South Korea. For its part, Japan is bigger than a middle power but not a superpower. I think these countries are trying to make accommodations. If you look at South Korea, for example, it has agreed to revise the South Korea-US Free Trade Agreement and has made some concessions with regard to auto exports. At the same time, South Korea has good relations with the China. So if we move to what the Trump administration wants in terms of protectionism and industrial policy, it may not necessarily be directed against every country in the world. Indeed, a lot of the protectionism may be focused on trade and investment between the US and China. At the beginning of the Trump administration, US policy targeted a large number of countries on steel and aluminum and autos, but I think we are slowly evolving to a policy where the main focus of the US is on China. So the real question is, will the middle, small, and large countries be able to play a game where they can work with the US and continue to trade and invest in China without the US balking? This raises a big issue for these middle powers in terms of policy. At UC Berkeley we are doing a major project collaborating with scholars from South Korea, Taiwan and others on middle power strategies in a rapidly evolving geopolitical and economic landscape. Although US-China tension will have a global impact, that does not rule out that countries can sell to both the US and China and receive investment from both countries. So, while I am not advocating a bipolar economic world between the US and China because there will obviously be damage to supply chains, one can imagine that there will be a kind of restructuring of the global economy so that some of the supply chains will be tied to each of these two poles.

JS: As you said, most of the East Asian countries are middle powers. How do you see the role of East Asia in mitigating the negative impact on the global economy?

Aggarwal: When you say East Asia, I assume you mean East Asia without China. If we look, for example, at Japan and South Korea, I think these countries are now in a difficult situation because they have a lot of economic interdependence with China. The Chinese have been buying products from these countries and often are subsequently transforming these products for export to the US. You may recall that during the 2008 financial crisis there was a lot of impact on the non-Chinese East Asian economies due to the recession in the US through this supply chain. So I think there will be some wrenching of supply chains, and if South Korea and other countries were selling to the Chinese and the Chinese were not selling to the US, these supply chains would no longer exist to the same extent. So I think that there will be a reorientation of these

supply chains for domestic demand in China and in the US. I think that what people are missing is the new NAFTA agreement, which is now called the US-Mexico-Canada agreement. This is an example of trying to create more supply chains within North America. I think that part of the strategy of East Asian countries including Japan and South Korea is to invest in Mexico or invest in the US and be part of those supply chains for American-oriented economies. That will have to continue if the US becomes more protectionist, but in general it has not been very protectionist against Japan or South Korea or European countries. Indeed, the Japanese have agreed to start negotiating with the US on a bilateral FTA and this serves as an example by which Japan can get around some of the conflicts between the US and China.

I should mention that I don't think this is a great outcome; I am just giving a realistic assessment of what is likely to happen. Restructuring of supply chains would be costly to the middle power economies, for American, Chinese, and Japanese corporations, and for firms in the supply chains in both Asia and North America. We should also remember that ASEAN countries comprise a market of over 600 million people, and that Japan and South Korea may be paying more attention to ASEAN countries given its relative size and geographical proximity.

There are also alternatives to looking to North American or East Asian markets. India, for example, has approximately the same population as China and will eventually surpass China in terms of market size, so I think there are other important markets that middle powers in Southeast and Northeast Asian countries can focus on. Africa, where the Chinese have had a free hand and invested aggressively, also represents an untapped market for these players.

JS: Another way might be to persuade China and the US to accept the idea of free trade as being important to achieve global economic prosperity. It is a classical economics textbook argument.

Aggarwal: I think this argument is ridiculous. I think economists have created this problem, because they have been naive about the geopolitical implications of trade. The other problem is that countries have continued to pursue industrial policy and the WTO has not been set up to deal with these countries. There are regulatory measures that can be taken on a global basis, but if you are a small country pursuing industrial policy, the US and other countries may ignore it. If you are a heavy rider such as China with industrial policies fundamentally in contradiction with the WTO and with free market economics – economists cannot understand this. Economists simply claim the Chinese are inefficient, and that industrial policy is a failure, all the while ignoring the fact that Japan became a great economic

power after the war by pursuing an aggressive industrial policy in shipping and steel. From the 1950s to the 1980s it served as an extremely successful development strategy for both Japan and South Korea. Contrary to what most economists claim, their strategy was not just good macroeconomics. Liberal market economics simply ignores the large amount of literature that shows the interconnectedness between politics and economics and the fact that some countries under some circumstances successfully pursue industrial policy – and that the WTO is not structured to cope with that, especially when a large country is doing it. So it's not that the Chinese don't understand free trade, but that their interpretation of free trade is very different from neoclassical economists.

JS: I read an article by Harvard Professor Dani Rodrik in the *Financial Times* recently, in which he seems to be advocating the idea of global trade rules being adapted to economic diversity. Since emerging economies play an important role in the global economy, we cannot force them to accept the values of OECD nations unanimously.

Aggarwal: This is hardly a new idea. In 1964 we had the creation of United Nations Conference on Trade and Development (UNCTAD) and since then developing countries have received special and differential treatment. In many of the multilateral agreements, developing countries are treated differently. The real problem here is that China is not a developing country, so to say that we should give developing states benefits and help is fine, but that's not the same thing with massive, successful economies that now pose a threat to the global trading system. So I think we have had special rules for emerging economies and I support those rules by and large, but I think that's very different from saying we should have special rules for China or Japan or India, which are large, dynamic economies.

JS: As you mentioned, China understands free trade very well. But what seems to be lacking in Chinese foreign policy is the idea of reciprocity. Could APEC or a more free and open approach towards international rules be a good way for China to participate in the discussion.

Aggarwal: I think this is a good point but fundamentally misunderstands the Chinese view. The Chinese understand reciprocity completely; they simply don't want to pursue it. It's not that someone has to teach them economics and how countries should behave; they have some of the leading economists and political scientists in the world. It is a matter of choice, and the

Chinese choose not to have reciprocity because having an aggressive industrial policy in which they support domestic firms over foreign competitors is fundamentally incompatible with an open market-based global trading system. In a global trading system designed by the GATT and the successor organization, the WTO, the logic was market-based players with minimal government support. The level of government support and the use of regulations in China and other countries pursuing industrial policy are fundamentally incompatible with the WTO.

JS: How about the TPP11? Could it encourage competitive trade liberalization and even induce China and the US to join?

Aggarwal: Competitive liberalization is completely nonsense. It is disastrous because it encourages the US to pursue bilateral trade agreements, to pursue sectoral trade agreements, and to essentially ignore the WTO. The Peterson Institute for International Economics kept thinking that somehow, competitive liberalization would lead to a conclusion of the Doha Round by 2007 if the George W. Bush administration pursued bilateral trade agreements. That is completely incorrect – the US pursued bilateral trade agreements that simply undermined the coalition for free trade that would have supported the WTO. I am a big fan of the WTO, and I believe it is a very important organization that manages disputes.

As far as the TPP11 is concerned, I support it too, although I prefer the WTO as a forum. Just because the US has pulled out, it does not mean that Japan and other countries like Singapore should not trade within a minilateral framework. If the US and China decide to join the TPP11, I think it would be great, but I don't think we can call that competitive liberalization. The Chinese and Americans understand TPP well and, in fact, the US tried to convert it into a political security instrument for domestic political reasons. Initially, the US was not blocking China's membership but then it became popular to use security arguments and create a TPP without China. We must also bear in mind the Transatlantic Trade and Investment Partnership (TTIP) effort between the EU and US – which also of course does not include China. The Obama administration's goal became to create two institutions, the TPP and TTIP, which both excluded China and set the rules for the global trading system. That has now been replaced by a direct bipolar strategy of the Trump administration, which is to ignore the TPP, pretty much ignore the TTIP, and simply focus on blocking trade and investment with China as a way of punishing the Chinese for their industrial policy strategy that they have pursued successfully for many years.

JS: I think East Asia, including China, needs to take

some initiatives regarding good global governance. Unfortunately, this seems unrealistic in terms of politics, but in terms of the economy or culture it might be possible to achieve a more meaningful foreign policy among countries in East Asia, namely Japan, South Korea and China. How do you think we can achieve such good relations and a good foreign policy among these three countries?

Aggarwal: I think it is simply impossible, and I think the reason that there is no Northeast Asian agreement of any significance is because of political disagreements between the three countries. There's the Japan-South Korea dispute over islands and Japan's conduct during WWII, there's a similar China-Japan dispute over territory, and the South China Sea controversy has continued in the broader region. I think it is naive to believe that economics and politics can continue on separate paths without colliding. We had that for some time, but there was always a lot of tension, and the Chinese have stopped following Deng Xiaoping's view of the world which was "Let's have a peaceful rise" and have now decided to be much more aggressive in the political and security realms. I don't think you can have very good economic and open relations when the political system and the security system start closing down. I think we had that for some time because the US was very much involved in East Asia and China was following a policy of trying to develop its supply chains and buying products from all over Southeast Asia to sell to the US, but I believe that world is coming to an end.

Role of Economic Relations & Soft Power in Mitigating Political Confrontation

JS: Wouldn't a recognition of the merits of economic relations be to some extent helpful in mitigating political conflicts?

Aggarwal: I think that sounds good, but I am not a believer in the theory of "commercial peace", which argues that growing economic interdependence leads to global peace. I simply don't believe that proposition. Norman Angell expounded this in 1913, and then World War I took place in 1914 shortly after the book was published. The notion that trade and cultural relations will help overcome fundamental political problems is unrealistic. I don't think that economic cooperation will suddenly lead to peace and harmony. Until there is a fundamental approach to dealing with these political and security problems including their territorial disputes and China's unwillingness to abide by judicial rulings from the Permanent Court of Arbitration, states in East Asia have little reason to shift their

policy. In fact, by continuing with economic exchanges with China and closing one's eyes to what the Chinese are doing, I think it just convinces the Chinese that they can continue what they have been doing, which is being aggressive in terms of their territorial demands and guaranteeing their economic supply chains.

Instead, the Trump administration has set out to address China's industrial policy. I am not a great fan of the Trump administration with regard to other policies so I am not advocating that it is doing a good job. We should remember that the Obama administration was also very concerned about China – as evidenced in several WTO filings arguing that the Chinese are undermining American industry and engaging in behavior detrimental to the global trade regime. The fundamental difference is that the Trump administration is much more aggressive. Ironically, there is much more continuity in US policy toward China with respect to trade and investment than we might think.

JS: I'd like to ask about soft power. What do you think in general about the role of soft power? For example, there are many tourists coming to Japan from China today. They seem to have a good impression of Japan, and so could this to some extent have some effect in mitigating political confrontation?

Aggarwal: My view on this is very negative. I am a strong believer in cultural exchanges and in educational exchanges and I think tourism is a good thing. However, if we believe that these educational exchanges and tourism will lead to global peace, then that is very naive. I don't think that Japan or South Korea or any state should base their policy on hoping that more Chinese tourism will lead the Chinese to have a more favorable impression of their country. Tourism is undertaken by individuals, while policy is made at a high level by Chinese government officials. In a strong authoritarian state like China, there is a strong disjuncture between the population and the government. I support tourism, but I don't think it will do much in terms of changing Chinese policies.

WTO's Role in Global Trade Conflicts

JS: Finally, I would like to ask about the WTO. You seem to support the WTO strongly, but unfortunately it does not seem to be working very well today.

Aggarwal: The problem is that the GATT/WTO was designed for a system of free market economics where countries would by and large desist from intervening in their economies. When the US did not want to use the GATT against Japan, the US simply used

unilateral power to push the Japanese into voluntary export restraints in textiles, in steel, in televisions, and automobiles during both Republican and Democratic administrations. The problem now is that the Chinese have no inclination to do this because they are not dependent on US security. My problem is that the WTO, which I strongly support, is not designed for countries like China or even countries like Japan. But with respect to the latter, Japan's reliance on the US led to bilaterally agreed-upon policies that helped to overcome the problem. I don't see that happening in the case of China. The WTO works well for countries that are willing to abide not just by the rules of the WTO, but by the norms. The norms are very important and while I don't care much for soft power, there are norms that influence behavior, and I don't think the Chinese are interested in these norms.

JS: How do you think the WTO could be strengthened?

Aggarwal: It is very difficult to strengthen the WTO in the current environment. China is a member of the WTO and the WTO operates in terms of unanimity, and so I really don't see any particular strategy to strengthen it at this point beyond procedural improvements such as expedited rulings. In general, I support WTO rules and believe that the dispute resolution process is very useful, despite it being slow and easily circumvented.

As I noted, I am not sure if you could design a better WTO in the current environment, although in practice I wish we could. There has been talk of majority rule and I am not against such an idea, but how do you reconcile countries pursuing aggressive industrial policy with an institution that is explicitly designed to punish state intervention in the market? This question has fundamentally not been resolved by the WTO and its member states. I think that one can talk about ways to fix the WTO but until the Chinese make some commitment to it in a serious way, I think the US will remain skeptical of it, as already demonstrated by the Trump administration. In my mind, the GATT and WTO were the greatest trade institutions in the postwar era, and unfortunately they have been undermined by countries seeking a free ride.

JS

Edited with the cooperation of Joel Challender, who is a translator, interpreter, researcher and writer specializing in Japanese disaster preparedness.

Indo-Pacific Cooperation from Indian Perspectives

By Sachin Chaturvedi & Priyadarshi Dash



Author
Sachin Chaturvedi



Author
Priyadarshi Dash

Introduction

The Indo-Pacific region has assumed importance as a source of global stability and peace. The prevailing contestations in the waters of this region have given rise to security and strategic formulations. However, in last few years the Japan-India partnership has given the region an important perspective on international development. Further, India and Japan has been vocal in promoting a free and open Indo-Pacific (FOIP) for peace and prosperity in the region. FOIP is a joint initiative by India and Japan for cooperation in Africa in various development projects (Brendon J. Cannon, “Grand Strategies in Contested Zones: Japan’s Indo-Pacific, China’s BRI and Eastern Africa”, *Rising Powers Quarterly*, 2018, Vol. 3, Issue 2). Other countries that are likely candidates for FOIP are Bangladesh, Sri Lanka, Myanmar and Indonesia. FOIP sets a vision for the common future of the people in the Indo-Pacific region.

Further, the region covering two oceans — the Indian Ocean and the Pacific — is not only home to a diverse set of countries but is endowed with precious natural, mineral and human resources. From India, Bangladesh, the Maldives and Sri Lanka in South Asia to Myanmar, Indonesia and Thailand in Southeast Asia, to Japan and Australia in the Pacific and to Kenya, Tanzania, and Madagascar in Eastern Africa, the Indo-Pacific region has witnessed several variants of development experiences. For instance, while Southeast Asian economies experienced faster industrialization and high GDP growth through export-led growth strategies and development state models, India and other South Asian countries experimented with a mixed economy in their post-independence periods and subsequently cautious liberalization and privatization. At the other extreme, Japan is a developed country in Asia characterized by a prolonged period of growth stagnation and an aging population.

These different development models in these Indo-Pacific sub-regions have produced divergent outcomes manifested in the coexistence of high economic growth and abject poverty and income disparity. Although a host of factors may explain this mixed development outcome despite similarities in resource endowments, there exist some serious gaps in resource allocation and enabling policy environments in these countries.

In terms of crude development indicators, countries in South Asia and Sub-Saharan Africa are dramatically different from the level of development in East Asia and Southeast Asia. It therefore presents a case for a virtuous model of international development cooperation

among the countries in the Indo-Pacific region. India and Japan may initiate this process of engagement in the form of investment in physical and social infrastructure, technology transfer, skill development, local industrialization, capacity building and people-to-people interactions. By following the principles of development partnership, other countries in Asia and Africa can jointly envision a common roadmap for attaining inclusive growth and development in the Indo-Pacific region. This may be explored in the framework of growth theories that facilitated development in the successful developing countries.

Growth Poles — Catalyst for Balanced Regional Development

Several paradigms dominated development thinking in developing countries in the postwar period. While Roy F. Harrod and Evsey D. Domar, Albert O. Hirschman, Ragnar Nurkse, Joseph Schumpeter and others provided alternative approaches towards development in the 1950s through the 1970s, several institutional innovations were conceptualized to realize the outcome of these development models. “Growth poles” is one such mechanism, originally coined by Francois Perroux in 1955, that propagates a growth trajectory with the prior knowledge of unequal industrialization and development in different regions even within the geographic boundaries of a country.

By “growth pole” he meant a center in abstract economic space from which centrifugal forces emanate and to which centripetal forces are attracted. This connects some urban centers (or dominant firms) where economic activity is concentrated. Thus “growth poles” can act as growth engines for the hinterland (remote or backward areas) which would ultimately lead to higher job creation, raise per capita income and mitigate income inequality. Perroux tried to build on the theory Schumpeter proposed on innovation and the role of large firms, which itself was dependent on discontinuous spurts in a dynamic world. Perroux tried to break away from the limiting geographical dimensions adopted in central place theories.

A similar concept — “economic corridor” — captures the mechanics of achieving the predictions of the growth pole theory. An economic corridor, which borrows the spatial perspectives, envisages a gradual path of evolution of a growth corridor — starting from a transport corridor to a logistics corridor, to an economic corridor, and then to a growth corridor.

As per this approach, improved connectivity would facilitate

efficient utilization of natural and human resources in the hinterland and enhance urbanization and industrialization in the growth centers. This approach appears to be the most feasible option to meet the development aspirations of the countries in the Indo-Pacific region (“Asia Africa Growth Corridor: Partnership for Sustainable and Innovative Development — A Vision Document”, *RIS*, May 2017). Following this model, high-saving economies can deploy their surplus financial resources in building infrastructure and logistics in low-saving economies in the region which, in turn, would result in growth pole effects by incentivizing local firms in the invested economies to expand and diversify industrial production and move up in the value chains. Parallel to investment in connectivity projects, skill gaps in local industrial sectors can be bridged through training, capacity building and customized on-the-job training. The net result would be higher economic activity in the local economy in the form of local industrialization, greater participation in regional value chains, remunerative employment of local labor and, possibly, higher standards of living.

To begin with, India and Japan can extend support to African countries to augment their capability to achieve higher economic growth and meet the United Nations’ Sustainable Development Goals (SDGs). India and Japan have their own development cooperation projects in African countries, but their joint initiative under the Indo-Pacific strategy would expand the scope of cooperation and be more effective. Since the Indo-Pacific region is a huge maritime area, the countries can leverage their marine resources for sustaining growth and alleviating poverty and unemployment. The blue economy includes several vibrant sectors which can be suitably brought under the purview of FOIP for effective coordination of the use and governance of marine resources in the Indo-Pacific region (Sachin Chaturvedi, “Asia Africa Growth Corridor (AAGC): Implication for Indian Ocean Regional Cooperation (IORA),” Presentation at Foreign Policy Analysis Forum at Bandung, Indonesia on Aug. 31, 2017).

Free & Open Indo-Pacific

An Indo-Pacific strategy has been in vogue over the past two years. Both India and Japan have expressed strong interest in this initiative for a peaceful and prosperous Indo-Pacific. Indian Prime Minister Narendra Modi and Japanese Prime Minister Shinzo Abe had emphasized the rising importance of the Indo-Pacific region as a key driver for global prosperity during their meeting in November

2016 in Tokyo. They both recognized that India’s active engagement in the region under the “Act East” policy and Japan’s “Free and Open Indo-Pacific Strategy” have the potential for deeper bilateral cooperation and synergy. It was stressed that improved connectivity between Asia and Africa is vital for the prosperity of the entire Indo-Pacific region. In this regard, Japan and India have decided to explore synergy between India’s “Act East” policy and Japan’s “Expanded Partnership for Quality Infrastructure” for close coordination both bilaterally and with other partners, to strengthen regional integration through improved connectivity as well as industrial networks based on the principles of mutual consultation and trust.

During his recent visit to Japan in October 2018 for the annual India-Japan Summit, Modi reiterated the unparalleled potential for development of relations between the two countries. He also recognized that the India-Japan relationship has been transformed into a partnership with great substance and purpose and is a cornerstone of India’s “Act East” policy. In a similar tone, Abe underscored the basic importance of the India-Japan relationship for regional order and is determined to advance the “new era in India-Japan relations” so as to further cooperate for the peace, stability and prosperity of the Indo-Pacific region. Based on their shared vision, the two leaders reiterated their commitment to working together for FOIP. They also affirmed that ASEAN unity and centrality are at the heart of the Indo-Pacific concept, which is inclusive and open to all. They shared their willingness to expand concrete cooperation with the United States and other partners. The two leaders’ vision for the Indo-Pacific region is based on a rules-based order that respects the sovereignty and territorial integrity of nations, ensures freedom of navigation and overflight as well as unimpeded lawful commerce, and seeks peaceful resolutions of disputes with full respect for legal and diplomatic processes in accordance with the universally recognized principles of international law, including those reflected in the UN’s Convention on the Law of the Sea, without resorting to the threat or use of force.

The two prime ministers reviewed with satisfaction the cooperation on development of connectivity via quality infrastructure, and other projects including capacity building for shared prosperity, carried out bilaterally and with other partners, in an open, transparent and non-exclusive manner and based on international standards, responsible debt financing practices, and in alignment with local economic and development strategies and

priorities. This synergy is embodied in collaborative projects between India and Japan in the Indo-Pacific region, including in Sri Lanka, Myanmar and Bangladesh as well as in Africa. In this regard, Modi and Abe welcomed the discussions for establishing the “Platform for Japan-India Business Cooperation in the Asia-Africa Region” to further enhance exchanges between Japanese and Indian businesses toward developing industrial corridors in the region.

The FOIP vision can be fulfilled through the following pillars:

Quality Infrastructure and Connectivity: FOIP would encourage building of robust institutional, industrial and transport infrastructure in growth poles among countries through quality infrastructure. Physical connectivity will improve trade facilitation and promote inter-industry linkages, and offer opportunities to countries to choose new product lines and shifts in production lines. Quality infrastructure may include power projects such as smart grids, renewable energy projects like the International Solar Alliance (ISA), telecom infrastructure, and so on.

Focus Sector Development Cooperation: Agriculture, health and pharmaceuticals and disaster management could be the focus sectors of development cooperation among the countries. Agriculture and agro-processing is an important field of cooperation among countries in the Indo-Pacific region. The specific development cooperation projects may include establishment of a supply chain for crop seeds and agricultural machinery, joint establishment of regional manufacturing for machinery and implements to boost farm mechanization, marketing networks for agricultural machinery, arranging finance and credit systems, and measures to reduce post-harvest losses of farm commodities such as pulses, cereals, oilseeds, eggs, meat, milk, and dairy products. The two important pillars of cooperation in health are advancing health research collaboration and medical education as well as industrial cooperation in the pharma and healthcare sector. Some prospective areas include health systems research, strengthening the creation of a surveillance network including for precise real-time epidemic tracking, pandemic preparedness for emerging and re-emerging infections, drug resistance surveillance for diseases like TB, HIV, development of point of care diagnostics, anti-microbial resistance, etc. In the field of disaster management, India's experience with management of natural calamities such as floods, tropical storms, drought conditions, etc. can be shared with other countries in the region.

Skill Development and Capacity Building: Education and skill development are important areas of capacity building. Countries in the Indo-Pacific region can share their experiences with other countries to meet skill gaps. For instance, India has an advantage in the healthcare sector, medical training and other capacities. Similarly, India and Japan can collaborate in Africa in mining and mineral exploration sectors. It would also be essential to synchronize capacity building and skill development to industrial demand at the ground level. Entrepreneurship Development Institutes can be established for creating cadres of future entrepreneurs in the region.

People-to-People Partnership: People-to-people exchange is important for sharing of experiences at the grassroots level as well as for improving human potential through capacity building and training. Public understanding enhances the durability of any project or institution, but most people engage only when their personal interests are addressed. The gains from economic interdependence are more secure when they are widely understood. Tourism and education are the major mechanisms of people-to-people interactions. Universities can play a key role in strengthening greater interaction among the people of the region for fulfilling the dream of FOIP.

Southeast Asia has extremely rich experience in this regard. The saga of economic growth in the ASEAN region has several fascinating stories of economic corridors and growth poles eventually leading to regional integration. The economies of ASEAN countries could evolve a balance in hard and soft elements that optimize a corridor's competitiveness. In this effort inter-sectoral multilevel approaches could provide growth impetus for small and medium enterprises.

India has recently implemented several development schemes which can be replicated in other countries for desired impact on the socio-economic conditions of the people. In recent years, India has stressed paradigm shifts in policy approaches to initiate and expedite economic transformations promoting inclusion, well-being and sustainability. The comprehensive approach to policy making is meant to link nodes, spread policies and fill the voids in policy interventions to make transformations effective and credible. This largely overlaps with the integrated approach of the SDGs. The most noticeable change in approach has been initiated to make economic and social inclusion a robust, time-bound and self-sustaining process. The approach has been to move beyond entitlement to

empowerment and to entrepreneurship. This is being achieved through measures beyond temporary income transfers. Modi's scheme for financial inclusion known as "Pradhan Mantri Jan Dhan Yojana", aimed at bank accounts for all with an assurance of social security benefits linked with such accounts, has been hailed as transformative. Likewise, schemes of financing for small entrepreneurs, such as MUDRA, and the same for the marginalized and women under the name of "Stand Up" India offer unprecedented opportunities for transformation. The social sector agenda has been set straight through exemplary focus on saving and educating the girl child, protecting and caring for maternity and comprehensive efforts to eradicate malnutrition.

Under-development in India has meant lowly living conditions, poor sanitation and open defecation among the underprivileged. The government's "Clean India" campaign is meant for time-bound results. India's focus on clean fuel and renewable energy is massive and magnificent at the same time, setting global standards. India has undertaken huge programs on supply of subsidized clean cooking gas reaching maximum households and benefitting women. India is on a steady path of energy conservation and efficiency with availability of the cheapest LED bulbs globally and has reached lower per unit costs for solar energy than thermal. Finally, in India high-speed broadband connectivity with the Digital India Programme shall be reaching all villages. India's policy efforts on localizing development and thereafter contextualizing SDGs are a valid model for emulation in the Indo-Pacific region. India is ready to share knowledge, expertise and institutional designs with other countries for a robust partnership on the SDGs. Moreover, India's maritime projects such as Sagarmala and Chabahar port are a reflection of its emphasis on developing economic corridors in the Indo-Pacific region.

Future Roadmap

Complementarity between different countries in the Indo-Pacific region has to be studied and explored further for deeper understanding. Projects in different sectors can be identified based on local needs and development priorities. Since FOIP envisages partnership, the joint mechanisms of identification, financing and implementation of projects involving two or more countries may be encouraged. Physical connectivity is the precondition for strengthening economic and growth corridors.

The advantage with Japan is in its specialization with quality infrastructure, which in the forms of roads, railways, airports and seaports would reduce the cost of transport of goods and ensure greater mobility in the urban space with much lower carbon footprints. The challenge would be to motivate leading actors from Japan to bring Africa into their roadmap, although the Tokyo International Conference on African Development (TICAD) VI has suggested several ways for leveraging business partnerships in Africa. There are increasingly encouraging results one comes across. Japanese business presence in Africa has steadily increased in the past 10 years. Official figures estimate that in 2017, 795 Japanese corporations were operating in the continent, up 7.7% from 738 in 2016 (Chika Kondoh, "Strong Call for African and Japanese Businesses to Deepen Ties on Eve of 2018 TICAD Ministerial Meeting in Tokyo", Oct. 5, 2018 UNDP, Tokyo).

India, through the India-Africa Forum Summit (IAFS), has already formally structured its age-old relationship through new context partnerships with several countries. The last IAFS in Delhi had a record 41 of the 54 leaders of the African Union (AU) come together, compared with the previous participation of just 15 leaders or less in 2008 and 2011. This shows the impact that the government of India has evolved over the years with its partners.

In the sectors identified above, including agriculture and agro-processing, health and disaster management, the specific modalities of implementation of cooperation projects may be formulated. FOIP should devise proper governance structures for optimum and legal use of marine resources for economic growth and well-being. Native coastal communities dependent on fisheries, shipping, coastal tourism and other sectors may be given inducements to invest, take ownership and advance knowledge in the blue economy. Under the FOIP strategy countries can think of creating special funds for expediting certain cooperation projects on a priority basis. **JS**

Sachin Chaturvedi and Priyadarshi Dash are director general and assistant professor respectively at Research and Information System for Developing Countries (RIS), New Delhi.

Interview with Yixuan Zhang & Shu Kittaka, Presidents of Jing Forum 2018

Jing Forum — a Venture for Youth Exchanges Between China & Japan

By Japan SPOTLIGHT

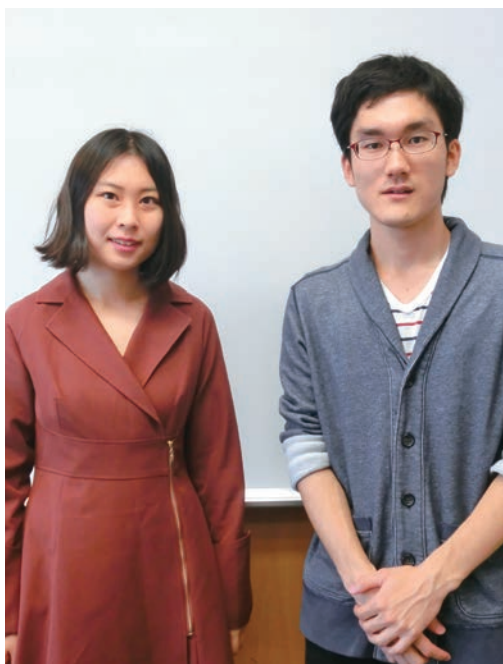
Have you heard of Jing Forum, a venue for academic discussion between students at the University of Tokyo and students at Peking University? Friendships made at a young age can be invaluable and can often last a lifetime. If such friendships involve people of different nationalities, they could help those nations achieve better relations in the long run. Is this a sentimental or idealistic view? *Japan SPOTLIGHT* interviewed a Chinese president and a Japanese president of Jing Forum in October 2018 in Tokyo. We found them both to be forward-looking and optimistic about the future, as most young people are.

(Interviewed on Oct. 4, 2018)

Jing Forum Presidents

JS: Please introduce yourself and tell us how you joined this forum.

Kittaka: My name is Shu Kittaka, and I am a senior at the University of Tokyo, majoring in International Relations. I'm going to work for my country as a bureaucrat from next spring and I joined Jing Forum because a friend of mine was participating in it two years ago and recommended it to me. I also found that this forum gives us the chance to discuss interesting topics with top students from China and through that process I wanted to get a deep understanding of what Peking University students think about their society and politics and so on. I participated last year as a delegate and enjoyed the discussion, so decided to become the president and manage the forum this year.



Ms. Zhang Yixuan and Mr. Shu Kittaka

Zhang: My name is Zhang Yixuan and I am a senior student from Peking University. I major in Spanish Language and Literature in the School of Foreign Languages, and after graduating I intend to continue studying law. I have been in Jing Forum for three years, as I joined as a freshman in 2016, and was a delegate to the section on social justice. Later on I became vice president in charge of academic preparation, and that year we had three section topics: gender, elitism and globalism. This year, I am in charge of Jing Forum and my reasons for participating are multifaceted. I really want to understand

Japan as a neighbor, because Japan is one of the first countries I grew up to know; I came from Shandong Province, which is just across the sea from Japan. I have seen a lot of activities sponsored by Japanese corporations so I basically grew up influenced by Japanese culture. So, when I got to Peking University and had the chance to join Jing Forum, I saw it as a good opportunity to deepen my understanding of Japan. So I stayed in the forum for three years and found it a great experience.

What Is Jing Forum?

JS: Could you give a brief background to Jing Forum? Also, it seems there is a very detailed procedure for publishing reports or conclusions, so could you

explain about this procedure?

Kittaka: Basically the forum was founded in 2005 and at that time there was strong mistrust between China and Japan over Prime Minister Junichiro Koizumi's visit to Yasukuni Shrine. So, some of the members of the University of Tokyo thought they could do something to ameliorate relations, and asked students at Peking University if they would like to come together in a forum to discuss such issues. That is the basic foundation of the forum. We have three sections for each year. This year we have cultural diversity, regulations in cyberspace, and competition and justice. Each section has five people from the

COVER STORY 7

University of Tokyo and five people from Peking University, and then we also each have four members of committees, making 19 students from each university. We have discussions around the table, but also interview professors or people in companies to deepen our understanding of relations between our countries or social problems in each country.

Zhang: Maybe I can add something about the procedure. In early April we have a pre-session, which is for topic selection. A University of Tokyo student will fly to China and join us for topic selection, and so we will recruit members at our respective campuses and then collect some basic proposals for our general topics. In that session in April, we get together to select the three final topics for the year. Afterwards, with the help of professors and also other students, we prepare other interesting topics from our respective universities. Then in September, we have the Beijing session, which lasts for a week, then the Tokyo session in October. After these sessions, we summarize our discussion results and publish the report books, one in Chinese and one in Japanese. Basically, we then start to recruit more members and start to prepare for next year's discussions, so we are busy all year round.

JS: So you publish your report on a particular website for this forum?

Kittaka: Yes, we post them on the website, and also publish an actual booklet for supporters.

Zhang: On the Chinese side we have various ways of publishing our results tailored to different sections of the public.

JS: How about language? One in Japanese and the other in Chinese?

Zhang: Japanese and Chinese. We use English in our discussions, and sometimes when we make a report book to target our Japanese audience, we use English.

JS: I am curious about the participating students. Are they mostly majoring in international relations or politics, or economics?

Kittaka: Some are majoring in international relations, but there are also law faculty students, and even science and computer science students.

Zhang: This year we have cyberspace regulations, so that is why we have computer science students. A wide range of students participate in the forum.

JS: I am also curious about the process of topic selection. You explained about the procedure, but is it a spontaneous discussion, not based upon any public information? Do you just get together and talk about recent news or topics in the media?

Zhang: Basically, for topic selection, the various section leaders have different disciplines and so their academic background pretty much contributes to their topic section. A student majoring in international relations was a member of the globalism section last year, and after that discussion she wanted to try to explain why both our societies are becoming more diverse, and so she raised the topic of cultural diversity as the main topic. We finally decided on that topic, and that is just one example of how it works. One student with a particular academic background comes up with a proposal, does some academic preparation work, and tries to identify a topic that is pertinent to current debate. Then, that person will be in charge of introducing that topic and explaining its significance. Although it is a spontaneous discussion, sometimes it is a little bit more like a debate because we are trying to clarify our positions and persuade other people regarding them.

Kittaka: Most of the board members of the committees are from the Jing Forum of the previous year, and then we recruit section leaders around January. When we interview them, they bring up some ideas that they want to discuss. When we go to Peking University in March, section leaders from both universities decide on what they will talk about. So the topics are all up to them in a sense.

Zhang: The section leaders from each country will probably have different ideas about what they are going to discuss, so that is why we need to gather in April, to try and combine these ideas into a unified topic.

JS: For example, this year's topics are very interesting: cultural diversity, cyberspace, competition and justice. I think these are relevant to the global economy, not necessarily to bilateral relations between Japan and China. So are you focusing on issues from a global context or a bilateral one?

Zhang: I think we need to take both into consideration. We think globally sometimes because we discuss these issues in English. Also, sometimes I find that our universities have a lot of similarities, so we usually select topics that are pertinent to worldwide debate. This is an interesting point because it shows that our individual identity is also diversified; we do not just focus on one country or international

relations between two countries. As academia often involves international exchanges, our backgrounds are becoming more diverse.

Kittaka: For this year, the topics are related to the global economy and globalization, but looking back five or six years ago we discussed the education systems in both countries. There were also times when we discussed leadership, labor or social gaps, which means that the topics are not necessarily related to economy.

Zhang: Although those topics are related to worldwide issues, when we hold debates we tend to focus on cases that are more familiar to Chinese and Japanese audiences. For example with cyberspace regulation, this year we focused on regulations in each country and their differences, so for any given topic we will look at the situation in both countries.

JS: I am curious about both universities' faculty's involvement in Jing Forum. Could you tell me if the faculty are also involved in your forum and if so, how are they involved?

Kittaka: For Jing Forum in 2018, Professor Akio Takahara and Professor Tomoko Ako supported us, and Prof. Takahara actually came to our opening ceremony in Tokyo and made comments about the three sections. He sometimes introduces companies or people who can support Jing Forum, or helps us find conference rooms or other spaces for discussion. They only support us, but do not actually take part in the discussions.

Zhang: We also receive similar support, usually from the office of International Relations of Peking University. Teachers from that department help us with logistics, to recruit members, and to provide academic guidance. Some professors come to our Opening Ceremony and enlighten us regarding issues in Japan or China.

Discussions in Jing Forum 2018

JS: How is this year's Jing Forum going so far?

Kittaka: On the topic of cultural diversity, they discuss more abstract ideas — the questions are about cultural identity or whether all cultures are equal. What they are doing is to analyze this globalized world and seek a desirable model in which a majority culture can compromise with a minority culture. They are also looking at more specific cases such as the Okinawa problem in Japan or the Xinjiang issue — the separatist conflict in the far northwest province of China — or gender issues.

JS: I am very interested in the third issue: competition and justice. What was generally discussed?

Zhang: Competition and social justice is interesting because of its continuity. Through discussions over 13 years in Jing Forum we have found a lot of issues related to social justice. I myself joined the social justice section in 2016. Competition can somehow contribute to more efficient work, but can also be harmful to society because it can fuel inequality, and especially on equality of outcomes and opportunities there is a lot of philosophical debate. We want to cover education and business because these are topics related to everybody, and everybody can have something to say. We illustrate the differences between Japan and China in high school education, and can figure out different levels of high schools and why they are different, whether they emphasize comprehensive education or education that merely focuses on getting higher grades. We are comparing these different factors and how they affect competition and whether they affect equality. We have discussed, in the context of China and Japan, whether some corporations are creating a monopoly, and whether that can affect both individuals and society in general. After graduation, students in both countries want to go to big firms to work, and in the recruitment process they want to find out if there are any factors relating to gender or other issues.

JS: This is a very important issue, as there is now a trend toward populism in various parts of the world, including in the United States and Europe. What is behind this? Is it due to expanding income inequality between the rich and poor? This is often interpreted as an outcome of competition. In your discussions, do the majority of students support the idea of social justice, or competition? Was there a consensus?

Zhang: Personally I don't think that social justice and competition are in conflict. As for the trend of populism, actually last year we covered two topics related to that: globalism and elitism. The idea is that globalization only contributes to the welfare of the elite class and that the public in some societies are suffering. My personal idea is that, when it comes to abstract terms like social justice, of course everybody will support it, but when it comes to specific cases we can see a lot of factors involved and there might be differences between Chinese and Japanese standards. We need to remember that our delegates from each country do not represent our respective societies in general as we have similar educational backgrounds. We read similar books and accept similar ideas that are quite Westernized, so we have to keep this in mind. We try to use statistics from both countries to compare our ideas.

COVER STORY 7

JS: This is a very important point. The students represent individuals rather than the country.

Zhang: When it comes to your personal identity, it is hard to separate that from the identity of the community.

Kittaka: Yes, and many of the delegates in the Tokyo forum come from the Kanto area rather than regional areas and so their opinions are somewhat city-oriented and do not represent the rural areas. We try to keep in mind that we're not representing our country. The delegates in Peking University may be more diverse and represent different regions.

Zhang: On the composition of delegates in Peking and Tokyo, in last year's discussion they actually compared the individual background of each delegate, and it showed that most Tokyo delegates are from the Kanto area and have a similar background, while the Chinese students had more diverse backgrounds. Also, Tokyo delegates see themselves as being the elite, while the Chinese students do not see themselves that way and feel it is hard to regard yourself as one of the elite in China as it is so competitive to become one.

Kittaka: In Tokyo, students felt that they were among the elite just by having entered the University of Tokyo, while this was not necessarily the case with Peking University. There they need connections to political power to join the elite. So when it comes to fairness, there is a big difference in values, as University of Tokyo students' emphasis is on individual rights or individual backgrounds when thinking about competition. In China, there might be more emphasis on social mobility than in Japan in terms of getting into a top university.

Zhang: We have different perspectives on these issues and different results. When it comes to the University of Tokyo, I think most students come from urban areas, especially in Tokyo. But the process is fairer because there are unified tests for students of all regions. In China, we have different tests for different regions and this gives different outcomes. If you live in Beijing or Shanghai you have a good chance of entering top universities, but if you come from a province like mine, it is increasingly hard. When it comes to the results, it seems that we don't have that high a concentration of students from Beijing or Shanghai. Social mobility in China is kind of diminishing because when it comes to the process of development it is a global trend — social mobility improves alongside development. In our debates and thought experiments, I think delegates are not just representing themselves; they are trying to summarize social impacts that they perceived themselves.



Forum's Merits

JS: It seems that exchange of opinions, information and values between students of both countries is a major priority for this forum. This will certainly enrich your knowledge and experience and be very useful after graduation in whatever you do in your work.

Kittaka: I agree. Our main goals are to exchange information and see the fundamental differences in our values. Sometimes we try to reach a conclusion about what an ideal society is and how to get there, but we found that is very difficult because we have completely different societies so actually cannot imagine such an ideal society.

JS: What does the conclusion look like after each debate?

Zhang: Sometimes it is hard to reach a conclusion about what an ideal society looks like in the context of fairness, so in our report book we have some interesting conclusions, and we just truthfully record our discussion process and also whether people are reaching a consensus, and the reasons why we cannot reach it. We don't look for a one-sentence conclusion but more to identify the reasons why there are differences, and to analyze the roots of those differences. I think that reaching conclusions and making policy suggestions is not the main goal; rather, it is about mutual trust and mutual inspiration and to really understand our respective societies.

JS: Having listened to your comments, I think this is a very useful forum for improving friendship because you discuss many important issues as individuals.

The forum was founded in 2005 and has been going for almost 15 years, so friendships must have grown a great deal. Do alumni of the forum sometimes address you or talk about their experiences?

Kittaka: Sometimes we have the chance to meet alumni, and we invite them to the party after the final presentation. Other than that, I sometimes hear that alumni chapters gather in places like New York, or that alumni end up working together in the same companies, for example in the banking sector.

JS: You have made these friendships at a young age and they last a long time.

Zhang: Yes, and not just delegates of the forum, but also university students whom we present to, because we promote our ideas and friendship to them. When we introduce Jing Forum to Peking University students, we are trying to show them how wonderful Japanese society is and to attract them to our forum, by which we can promote friendship. We are not just providing them with images; we are trying to invite them to join us in order to find the answers to their long-held questions. Through this process, we can create mutual trust and understanding, and discover that while we have many differences there are also lots of similarities. We are also trying to understand our own identities: my first time in Jing Forum was very enriching as I didn't have a clear identity as to who I was and who I represent, but through debating these ideas I think I am able to understand myself more deeply.

JS: Whatever you do after graduation, this experience is very useful. Are any of your senior members in China living in Japan or vice versa?

Kittaka: Yes, I know some alumni from Peking University now living in Japan.

Zhang: One of our past delegates was interested in the environment, and after graduating he worked in Japan for seven years and then returned to China, where he gained an MBA. I interviewed him and had a deep impression of how Jing Forum can impact on your future life. I also know a student from Peking University who worked in Japan for nine years after graduating. The friendship and inspiration that they got from Jing Forum was certainly a big help to them.

Next Year's Topics & Future Issues

JS: We mentioned topic selection, but are there any topics selected for next year, such as the issue of

trade wars or other rising geopolitical risks?

Kittaka: Of course, many students are interested in these issues but they are a little far removed from our daily lives so it is hard to talk about them individually, based on our own individual values. It is going to be based more on research or academic background provided by professors; we need to focus more on the actual discussion process.

Zhang: Especially when it comes to the trade war, it is more relevant to China so perhaps Peking University students should be more familiar with that issue; I personally feel it is more of a zero-sum game, but when it comes to the Jing Forum discussion, the idea is to say no to a zero-sum game. We prefer the idea of a plus-sum game, and that is why we are trying to reach that goal through cooperation and communication.

JS: What do you think is particularly important when considering how to maintain good relations between Japan and China?

Zhang: I think that economy and trade are definitely important. To use my experience in international exchange and student forums, I think that people-to-people relations are also important. For example, China and Australia have very close trading relations, but on the level of politics or people-to-people we are not so close. However, between China and Japan, there are very strong linkages between Japanese and Chinese people and these take place irrespective of the policies between the two countries. We know that over history there has been communication between our two nations and even in difficult times our cooperation never really stopped. We learn a lot from Japan, and a lot of more abstract words that we use enter our lexicon from Japan. These two countries have influenced each other throughout history and so it is not just about economy or trade, but really about people and people relations. When Chinese tourists come to Japan, even if they can't read everything, they feel a sense of familiarity and this is the foundation of mutual trust.

JS: So you think people-to-people relations are an important element of this forum. Also, I believe that "soft power" is very important for such relations.

Kittaka: Yes, when I ask Peking University students why they are interested in Japan, they often say that it was because they saw Japanese movies or animation, and so I think that soft power is indeed important as a way of getting people to develop an interest in Japan. This is very different from the formality of newspapers or the government. I am sure that trade and economic relations are very important between our two countries, as the Japanese economy is

COVER STORY 7

certain to go down over the next 50 years. Meanwhile, I am a little pessimistic about political relations because over the past 100 years we have fought against each other, and it is kind of inevitable for the Japanese and Chinese governments to try and blame each other. That is why soft power can play an important part in forming people-to-people relationships.

JS: Will your forum discuss these cultural matters in the future?

Zhang: Yes. One reason why Chinese students join Jing Forum is that they grew up watching Japanese cartoons and are attracted to Japanese. On the other hand, China has not traditionally had such a strong cultural industry and its soft power is weaker, so it is somewhat curious as to what exactly attracts Japanese students to join Jing Forum.

Kittaka: The reason why I joined Jing Forum is because I was studying China and Chinese language too, and when I was entering the University of Tokyo people told me that this is the era of China and that China would dominate economically, so I thought it would be good to understand China better. I think it is easier for us to have a discussion with students from China using English, because it is a second language for both of us, so it is easier than discussing with English natives.

Zhang: When it comes to soft power, it has a foundation in hard power. Especially with China's burgeoning economy in the last few decades, Japanese students are very interested in understanding China, so it is a combination of hard power and soft power that forms the attraction of understanding each other.

JS: My last question is about language. Someone told me that in Japanese schools we pick up Chinese as a second or third language. Could there be a mutual line where China expands Japanese education and Japan expands Chinese education? This could help promote good relations, as language is an important form of soft power. In the future, could Jing Forum be held in either Japanese or Chinese exclusively?

Zhang: A lot of the delegates in the University of Tokyo are learning Chinese, and can speak it as their third language. Similarly at Peking University, delegates are learning Japanese and are doing this voluntarily rather than as a compulsory course. Personally, I feel that language barriers are diminishing around the world — studying a foreign language will become easier, and sometimes less important — because we have a lot of resources to help us communicate. In that



sense, attraction to another culture to study its language spontaneously will have a big impact. My personal wish is that China and Japan can be more attracted to each other to bring about mutual prosperity and understanding of each other's cultures.

Kittaka: When we debate, we realize how our cultures are really similar to each other, and while we usually use English, we sometimes find it difficult to define terms such as culture or Westernization. In that case we sometimes write down the kanji, and then we can express what we meant in English. It takes a lot of effort to learn each other's language, and I think that using English makes the discussion kind of neutral rather than Chinese or Japanese dominant.

Zhang: Another thing is that in academic research English is the dominant language, and this is really hard to change. We have to use English for the academic background to our debates. I am actually quite optimistic about our future, because if the world is more and more focused on cultures of civilizations, Japan and China actually have a lot of similarities compared to other nations. We have easier access to transport and communication, so when these barriers come down we will have even more opportunities to communicate with each other and understand each other, and when we can put aside our differences and understand each other, we can enjoy a more harmonious relationship.

JS

Written with the cooperation of Joel Challender, who is a translator, interpreter, researcher and writer specializing in Japanese disaster preparedness.

Perspectives on Global Risks: the 2nd JEF Global Risk Symposium I

Overview on Understanding the Structure of Geopolitical Risks

By Naoyuki Haraoka



Author Naoyuki Haraoka

The Japan Economic Foundation (JEF) has been studying the impact of geopolitical risks on the economy since 2013, in the belief that global geopolitical risks such as North Korea or the Middle East could seriously affect the global economy, as well as economic developments such as the world financial crisis in 2008. In 2017, JEF hosted a symposium in Tokyo on risks linked to the global economic performance which could have a deep impact on business strategies. This first symposium was an attempt to draw the attention of Japanese business people to some geopolitical risks as factors that could influence their business decisions. The second symposium in 2018 highlighted the fact that each risk involves a wide range of players and needs to be analyzed in terms of their different perspectives and the relations among them. With such a holistic overview of the nature of the risks, firms could better work on their global business strategies.

Why Does the Global Economy Feel So Fragile?

At the beginning of 2019, a few months after our second global risk symposium, some new geopolitical risks emerged, such as the trade war between the United States and China, as prime sources of concern for economists in their predictions for the global economy. At the symposium, we discussed Russia's influence on politics in European nations, as well as views on Brexit, geopolitical stability possibly to be provided by cooperation in the Indo-Pacific Ocean region, and the likely direction of North Korea. As time goes by, however, geopolitical risks evolve like an animal: we see new ones emerging and old ones changing.

For business people, perhaps the key question in 2019 will be why the global economy feels so fragile. This concern about fragility could stem partly from a possible breakdown in the global political order, creating severe economic disruption probably through a collapse in trade resulting from US-China trade frictions and a rise in protectionism. Other geopolitical events could also be sources of fragility, as well as the possible unmanageability of accumulated public debt among leading OECD nations. Although political centrists may hope that anti-globalization movements led by the right will founder, as perhaps seen in the US mid-term elections where the Republicans led by President Donald Trump lost their majority in the House of Representatives, there are also such movements led by the left, as seen in the election of Andrés Manuel López Obrador as president of Mexico in 2018. Populist movements may continue to

be sources of geopolitical risk, so we could continue to see economic fragility, which could also be expanded by deeper fluctuations in exchange rates as well as stock market volatility that could cause serious turbulence.

Overview of the Structure of Geopolitical Risks

Geopolitical analyses should be free from any subjective and emotional views, such as "anti-American" or "anti-Russian". Think-tanks must obviously take a neutral and objective approach to any actual event or issue to present the public with the evidence. While economic developments are mostly analyzed from this perspective, geopolitical developments are occasionally seen to be biased. This possibly originates from the Cold War period when nations were categorized into a group of either capitalist or socialist countries. Today, even after the end of the Cold War, we can see a "pro-Chinese" or "anti-Chinese" bias in some geopolitical views. These were not shared by our symposium's organizers and speakers. The symposium has a mission to provide factual analyses and a variety of views on geopolitical events. I think business leaders can best learn from such objective analyses to help them with their business strategies.

We are living today in what has been termed a VUCA world – meaning a world with volatility, uncertainty, complexity and ambiguity. In particular, it should be noted that under globalization the interlinkage between national economies is greatly enhanced, so that a policy or incident in any given country could affect the global economy overall. In addition, developed countries' economic performances have tended to converge today, as each one has come to a mature stage and even many developing nations have begun to reach that stage. Thus, the trend is for national economies to be synchronized, and in such a world the blurred relations between domestic economies and the international economy make issues more complex and ambiguous.

The increase in anti-globalization sentiment seen in many nations today stems largely from the excessive globalization of business activities, and this kickback itself has started to affect the international economy in the form of protectionism. With this trend, uncertainty is exacerbated by stock market or exchange rate volatility. In such circumstances, the need for a bird's-eye view of the global economy is increasing. For example, Japan's labor market reform will attract a non-Japanese labor force into Japan and thus

facilitate more FTAs involving Japan thanks to a greater flow of human labor. It may also encourage Japan to conclude an Asia-wide regional FTA, which could be instrumental in convincing the US or the other trading partners of the utility of free trade again.

Globalization itself should encourage geopolitical analyses to be holistic, given the deeper interlinkages among national interests and the world becoming more close-knit. Focusing only on any given geopolitical incident will not enable business leaders to create relevant strategies.

Sir Graham Fry, a former British ambassador to Japan, pointed out in the symposium in 2018 that although Brexit could gravely affect the future of the European Union, the geopolitical crisis in Europe should be seen more in terms of the rise in nationalism among European nations and the increase in Russian influence in this area. We should not forget that Russia would be the main beneficiary of any collapse in Western capitalistic and democratic values. The situation in Europe should be analyzed not only from the UK's perspective but also from that of other players, including Russia.

Deonanan (Raj) Makoond, chairman of Business Mauritius Regional Energy Working Group, mentioned the crucial role of the Indian Ocean for geopolitical stability in the world. The conclusion of the CPTPP (Comprehensive and Progressive Agreement for Trans-Pacific Partnership) was a successful step in efforts to integrate Asia-Pacific economies. Broad economic cooperation among East Asia, India and South Asia, and Africa would help achieve peace and prosperity by mitigating geopolitical risks caused by China's aggressive foreign policy in this area and also encourage development in Africa and reduce the risk of terrorism by extremely poor Africans. Thus the Indian Ocean region is important not only for Japan but also for stable growth of all the nations in this region.

Dr. Yong Sueng Dong, a former member of the Council of Policy Advisors to the President of the Republic of Korea, and Dr. James E. Hoare, an associate fellow of Chatham House and consul general at the British Embassy in Pyongyang at the time of its establishment, told the symposium that when trying to analyze North Korea it is important to recognize how it is linked with other countries and to understand the viewpoint of North Korea itself. It is necessary to look at the key players – China and Russia – as well as the US, South Korea, Japan and even Europe and Africa. It is also important to see the interlinkages between geopolitical risks. For example, today it is said in the media that China may use its power over North Korea to achieve its denuclearization in the hope of persuading the US to



JEF-KRA Global Risk Symposium 2018, Thursday, Sept. 20, 2018 at Iwasaki Koyata Memorial Hall of the International House of Japan in Tokyo

accept a compromise in China's favor in their trade negotiations.

Three of the four speakers mentioned above have contributed articles to *Japan SPOTLIGHT* largely consistent with their presentations at the symposium in 2018. Readers will gather from them that looking only at risks could simply result in making business become cautious. It is more important to think about solutions. A view of geopolitical risks that takes account of different players' views and the interlinkages among them – an overview of the structure of geopolitical risk – could provide clues to such solutions in clarifying the meaning of each geopolitical issue.

This is particularly important for the interests of multinational enterprises since they are doing business all over the world. They will need a holistic overview of geopolitical risks in formulating their global business strategies.

JS

Naoyuki Haraoka is editor-in-chief of *Japan SPOTLIGHT* & executive managing director of the Japan Economic Foundation (JEF).

Perspectives on Global Risks: the 2nd JEF Global Risk Symposium 2

The European Battleground: Geopolitics & the New Nationalism

By Sir Graham Fry



Author Sir Graham Fry

International affairs today are strongly influenced by two factors. The first is geopolitical: the economic and strategic relationship between the United States and China is now the most important in the world and increasingly characterised by rivalry rather than cooperation. The second is ideological: in a range of countries we are seeing a backlash against globalization and the rise of a new nationalism: this is, for example, expressed by the administration of US President Donald Trump as putting “America first”. These factors have created heightened risks for Europe as well as other regions.

Europe/China

Japan was much quicker than Europe to see that the growth of China’s economy was changing the global strategic balance. The strategic “pivot” to the Asia-Pacific region by the administration of former President Barack Obama was one wake-up call. President Trump’s more aggressive approach to China has broad backing in the US. European policymakers may grasp the importance of China intellectually, but on a day-to-day basis they tend to be more preoccupied by their own neighborhood, including Russia and the Middle East.

For many years, they have seen China in commercial terms as a growing market for European firms and a source of infrastructure investment. As part of the Belt and Road Initiative, 16 countries participate in a partnership called “Cooperation between China and Central and Eastern European Countries”, and even in the United Kingdom, Chinese companies participate in plans to build new

nuclear power stations. But more recently awareness of security risks has risen in Western Europe: examples are the growing concerns about China’s moves to obtain advanced technology, e.g. by acquiring European high-tech companies, and about the potential security threat from the supply of 5G telecoms equipment by Huawei. The European Union shares many of the concerns expressed by the US about China’s industrial and trade policies. If the US had been looking for allies in its struggle with China, it could have probably have obtained support from the EU, but it was not.

Russia: China’s Best Friend ...

A different context is provided by the alliance of convenience between China and Russia. For 20 years they have been the leading partners in the Shanghai Cooperation Organization and its predecessors, and they now engage in bilateral military exercises on land and sea. This has echoes of the Sino-Soviet relationship, but the balance of forces has been reversed. China’s economy is now eight times bigger than Russia’s and growing faster. In 2017 Russia was the top supplier of crude oil to China, and it has dropped its inhibitions about selling its latest military equipment, as shown by the supply of Sukhoi Su-35 fighter jets.

But what draws the two countries together is not so much practical considerations of this kind as shared objectives. Both of them see the US as their principal adversary, constraining their own exercise of power and influence. They both aim to weaken Washington’s international alliances and challenge the international order, which was largely created by the US and its allies in the postwar era. Both resist international efforts to promote democracy and human rights. The leaders of both countries see such policies as advantageous in defending their own internal legitimacy and gaining popular support. No wonder Chinese President Xi Jinping has called Russian President Putin his “best, most intimate friend”. If China aspires in the long term to become the dominant force on the Eurasian landmass, then Russia is an essential partner.

... But Poses a Strategic Threat to Europe

It is not, however, inevitable that Russia should be drawn so closely into China’s orbit. From a European perspective, it is well understood that Russia is an important neighbor, a major energy supplier and a large potential market for trade and investment.



Photo: <http://kremlin.ru>

Chinese President Xi Jinping and Russian President Vladimir Putin, July 26, 2018

Russia's position as a permanent member of the UN Security Council and its influence in international affairs should make it an important strategic partner. From Russia's perspective, Europe can provide much of the investment and technology which is needed to create a modern, industrial economy. There is a strong mutual interest in developing dialogue and cooperation.

The problem is that Putin has made a different choice. There is much debate about the reasons for this; but Russia's behavior in recent years has made it virtually impossible for European nations to have a constructive relationship with it.

One after another, Russia has used their internal divisions to destabilize neighboring countries and to take over part of their territories by force. Ever since the war with Georgia in 2008, it has exerted effective control over two regions of that country, Abkhazia and South Ossetia, which it claims are independent states. A similar situation obtains in Moldova. In 2014 Russia responded to unrest in Ukraine by sending troops without official uniforms into Crimea and annexing it. This amounted to the first forcible annexation of European territory, and the first forcible re-drawing of a frontier, since 1945. The vast majority of the international community condemned it, and the EU and US imposed sanctions on Russia, but its illegal occupation of Crimea continues. Russia followed this by intervening with similar methods to support separatist movements in eastern Ukraine, where the war, which has probably claimed over 10,000 lives, continues: a significant part of Ukraine's territory remains outside government control. Although Russia's attention has recently been diverted to its intervention in Syria, its seizure of three Ukrainian naval vessels last November shows that it is keeping up the pressure.

Not surprisingly, this pattern of Russian behavior has caused anxiety that it could be repeated in other neighboring countries with Russian-speaking minorities, including the Baltic States, which are NATO and EU members. Since the Georgian war, Russia has embarked on a sustained program to modernize its forces and improve their capacity for joint operations. This includes annual large-scale exercises on a rotating basis in each of its five Military Districts, plus a series of no-notice "snap" exercises. These can be, and have been, used as a cover for military intervention. In addition, Russia has increased its incursions into the airspace of NATO members. In response, NATO has been improving its own capability for rapid reaction. It has, for example, stationed four allied battle-groups in the Baltic States and Poland on a rotating basis, and increased the size and speed of the NATO Response Force. This is not a return to the dark days of the Cold War since conditions in Europe have changed in numerous ways, but it is striking that, whereas 15 years ago NATO felt confident enough to launch operations outside its Treaty area (e.g. in Afghanistan), its attention is now focused back on the direct threat to its members from a more aggressive Russia.

That threat is not just a conventional military one: it is a form of hybrid warfare, involving the deployment of conventional and irregular forces in conjunction with psychological, political and cyber

Photo: <https://mail.ex.ua/76677715>



Unidentified soldiers at Perevalne military base in Ukraine in 2014

assaults. Russian media outlets have become channels not merely for putting forward Russia's point of view but for advancing conspiracy theories and throwing doubt in the public mind about inconvenient facts. This in turn is amplified by Russian activity on social media, which has been shown to be extensive and mainly designed to stir up anger and division in Western societies. Last year, for example, US prosecutors published considerable detail about how the Internet Research Agency, a troll factory in St. Petersburg, used social media to interfere in the 2016 US presidential election.

The Russian government is also widely using its capability for cyber-attacks and doing so in a way which blurs the boundaries between criminal and state activity. A few examples have been publicized. In February 2018, the US and the UK identified Russia as the source of the NotPetya ransomware attack, which originally targeted Ukraine but is estimated to have caused over a billion dollars of damage to companies in Europe, the Americas and Asia. In October, the UK identified Russia's military intelligence agency, the GRU, as responsible for a number of other specific hacking and ransomware attacks and listed 12 aliases which it had used. Among its targets were the Organisation for the Prohibition of Chemical Weapons (OPCW) and the World Anti-Doping Agency (WADA). At the same time, Dutch authorities revealed how they had caught GRU operatives in the act of spying on the OPCW in The Hague and how one of their laptops linked them to a WADA conference in Switzerland. Their interest in WADA derives from the revelation in 2014 that the Russian state had been involved in systematic dope-taking by Russian athletes, and the subsequent investigations.

Their interest in the OPCW had an even more sinister origin – the attempted murder of Sergei Skripal and his daughter in the UK in March 2018. The OPCW confirmed that a rare nerve agent of a type called Novichok had been used. Later, a British woman unrelated to the Skripals found the residue of the Novichok poison in a waste bin and was killed by it. All the evidence points to the GRU as having been responsible for this too. The leaders of France, Germany, the US and UK jointly condemned "the first offensive use of a nerve

agent in Europe since the Second World War", and 30 nations and international organizations together expelled over 150 Russian diplomats in protest. The incident recalled the murder of Alexander Litvinenko in London in 2006 with a radioactive substance called polonium.

This European experience of Russian behavior may well have lessons for Japan's leaders in their relations with Putin and his government.

Europe's Ideological Challenge

Meanwhile, within Europe itself, there has been a rapid increase in support for nationalist parties in recent years. In Hungary and Poland such parties form the government; in other countries including Austria, Italy and Slovakia, they are part of a government coalition; and in many others they have increased their share of the votes in elections. The history, policies and leaders of these parties vary, but there are some clear common themes:

- Hostility to the "elites", who are seen as pursuing their own interests at the expense of ordinary people;
- Support for the nation-state, and hostility to international organizations, including the EU;
- Hostility to immigration and multiculturalism (and in some cases to Islam), which are seen as threatening national identity.

Such parties and such attitudes have existed for many years. What is new is the upsurge in support for them, and there have been many attempts to analyse what lies behind it. I suspect that there are three factors above all.

a) The first is economic. Globalization has benefitted many people around the world, but some in developed countries who lack advanced education and skills feel it has brought rapid change and insecurity but little, if any, improvement in living standards. Their dissatisfaction with their prospects and their sense of having been left behind seem to have come to a head when the financial crisis of 2008, followed by the euro crisis, brought a period of economic stagnation. Strongman leaders offering simple solutions and a return

to some of the certainties of the past appear attractive.

b) The second is cultural. During my lifetime the UK and other European countries have gone through rapid social change. New, more liberal attitudes towards gender, race, religion etc. have become accepted in the media and enshrined in laws, but not everyone is comfortable with these changes, particularly outside the large cities. The nationalist parties claim to be defending traditional values (and in some cases Christian ones), and often win greater support in rural areas and small towns and among older people.

c) Both these strands come together on the issue of immigration, and if there is one thing which has boosted the far right, this is it. The large inflow of immigrants from the Middle East in 2015 was a defining moment. In Germany, the Alternative für Deutschland (AfD) began as a party opposing government policy on the euro but only really took off when it switched in 2015 to focus more on immigration: it is now the leading opposition party in the Bundestag. The Hungarian government built a fence along its southern border and continues to play on fears of immigration. In Italy, Matteo Salvini, the interior minister, has increased his party's poll ratings through his tough line on immigrants coming by boat across the Mediterranean. And there are plenty of other examples.

European Integration at Risk?

There is, therefore, a strong challenge to the established political order in Europe, and in some ways that may be no bad thing. There seem to me two aspects, however, which could pose fundamental problems for the EU. The first is the hostility of the nationalists to the EU itself as a supranational organization, and the second is that in some instances they challenge the basic democratic values on which the EU is built.

On the first of these, the evidence so far is reasonably reassuring for the EU. The UK is the only country which is seriously thinking of leaving. Even at the height of the euro crisis Greece decided not to do so. Across Europe there continues to be widespread support in opinion polls for EU membership. In some countries nationalist parties have even decided to tone down their anti-EU rhetoric when it appeared to be a vote-loser. The central European countries which have rejected some EU policies, such as fixed quotas of refugees, derive substantial benefits from the EU single market and its structural funds. The present Italian government which initially talked up its determination to challenge the EU's limits for national budget deficits has in the end compromised.

Moreover, it would be wrong to believe that the nationalist wave will continue unabated. It is in the nature of the democratic process that parties wax and wane, and there appears to be a limit at least in Western Europe to the share of voters who are willing to support the far right. The situation varies considerably from country to country, and by their nature nationalist parties do not naturally cooperate with each other. Although they are expected to increase their number of seats in the European Parliament elections next May, they do not sit as a united bloc but belong to four different groupings. If the key to

Photo: EPP Summit, Brussels, March 2017



Hungarian Prime Minister Viktor Orbán and German Chancellor Angela Merkel

their growth has indeed been immigration, mainstream parties are developing new policies in response, and action by key governments has already produced a sharp drop in arrivals on the two main routes into Europe. Indeed the main impact of the nationalists in the long term may turn out to be changes made, for better or worse, to the policies of mainstream conservative parties.

None of this is intended to minimize the importance of this trend. There will be more tough arguments and difficult elections, and further progress in developing EU integration may be slowed down. But the main reason at present for blockages in EU reforms is not so much the rise of the nationalists as more traditional policy disagreements, such as in the eurozone.

In the long term the challenge to fundamental EU values may be more serious. The Hungarian government, for example, has taken a series of measures to limit the independence of the media and the judicial system and to restrict the activities of civil society. A particular target has been the Central European University founded by George Soros, which had to move most of its courses out of Hungary last December. Attacks on Soros have sometimes had anti-Semitic overtones. The Polish government has also carried out a series of judicial “reforms”, which have been criticized for reducing the independence of the judiciary. Such developments challenge the very basis of the EU as an association of democratic countries committed to the rule of law and human rights. Nor are they only an issue in countries with right-wing governments: recent actions by the Romanian authorities to weaken anti-corruption institutions have also caused concern.

Such issues are not easy for the EU to tackle. Under Article 7 of the Treaty on European Union a member state can be deprived of its EU voting rights by a unanimous decision of EU leaders if there is a serious and persistent breach of EU values, but the process is lengthy, and Hungary and Poland are likely to defend each other. Moreover, this is a highly political issue, and a punitive approach may only serve to strengthen nationalist feeling. Skilful tactics and strong political will are required, and it may well be hard for the EU to obtain clear-cut results.

The American Angle

The two issues I have highlighted – the Russian threat and the upsurge of nationalism – converge. Putin likes to claim that he is defending Christian civilization and values, and many (but not all) of Europe’s nationalist leaders have close links with him and oppose the EU’s sanctions on Russia. The risk is therefore that Europe’s response to Russia becomes divided and ineffective.

In such circumstances Europe has often benefitted from a strong lead provided by the US. Moreover, in military terms, although European governments are promising to spend more on defence and there is even talk of a European army, the reality is that NATO depends heavily on American military might. It is therefore a problem that Trump shares almost all the attitudes of the nationalists. He has been highly critical of mainstream European

Photo: <https://www.flickr.com/photos/whitehouse/42444673425/in/album-72157697284924301/>



US President Donald Trump with NATO Secretary-General Jens Stoltenberg, July 11, 2018

leaders, seems to admire Putin, is a big fan of Brexit and has even sometimes sounded doubtful about NATO. The US Congress has taken a harder line than the president against Russia and in defence of NATO, but perhaps the biggest risk that Europe faces is outside its own control – the unpredictability of the present US administration.

Brexit: an Error, But Not the End of the UK

In the midst of all this, the British people have decided to leave the EU. I believe that this is a historic mistake. All the factors I identified earlier as being behind the rise of nationalist parties in Europe contributed to it. As I write this, I have no idea on what terms Brexit will happen or even whether there will be a second referendum.

Even so, it is possible to exaggerate the negative impacts. Economically, the British economy (the fifth or sixth largest in the world) will suffer slower growth in the transition to new trading and regulatory arrangements. But UK business has many strengths and it will adapt: the City of London, for example, will continue to be one of the two largest financial centers in the world. A quick look at international comparisons shows that the UK has four of the top 10 universities in the world, the second-highest total of Nobel Prizes, the second-largest exports of services, the third-largest ODA spending and the seventh-highest defense spending. Even outside the EU, it will continue to be an active participant in world affairs, as a permanent member of the Security Council, a leading member of NATO and other international organizations, and one of the larger countries in Europe. Moreover, when the excitement about Brexit has calmed, the UK will still need to cooperate closely with its European neighbors, and they with it. That is an unchanging geopolitical fact.

JS

Sir Graham Fry was British ambassador to Japan (2004-8) and Malaysia (1998-2001), and is now an advisor to international companies.

Perspectives on Global Risks: the 2nd JEF Global Risk Symposium 3

Kim Jong Un's North Korea – What Has Changed?

By Yong Sueng Dong



*Author
Yong Sueng Dong*

Introduction

The situation on the Korean Peninsula evolved rapidly in 2018. The three inter-Korean summits and the North Korea-United States summit were events that we could not have predicted just a few months ago. At the center is Kim Jong Un, chairman of the State Affairs Commission of North Korea. Kim took over the leadership of North Korea at a young age. While North Korea maintains a socialist state, in actuality we can see it being ruled by a dynasty like in feudal times. North Korea has pursued extremely closed policies since its foundation, which has contributed to building up its mysterious image and increasing concerns about its military power under a dictatorship, and this has served as a source of its competitiveness. South Korea's assessment of Kim has changed dramatically. The first South Korean special envoy that visited Pyongyang and came into contact with Kim for the first time stated that "Chairman Kim Jong Un was well-versed not only in the relationship between the North and South, but also with the details of the background and history of international affairs." While this is only natural for a leader who bears responsibility for a country, this assessment of Kim was a clear expression of the outside world's perception of the young and inexperienced leader. The world, as well as some in North Korea, has generally considered Kim an extraordinary dictator who has, since taking power in 2012, threatened the international community with nuclear and missile development and did not hesitate to do away with not only powerful men, but even relatives such as Jang Song Thaek and Kim Jong Nam. In this way Kim's radical conduct significantly increased concerns about the political risks posed by North Korea for South Korea and the rest of the world.

However, since Kim became leader, North Korea has shown many internal changes. The international community did not take much interest in such changes as they were overshadowed by the nuclear problem. Since 2018, Kim has started to show himself to the outside world and assessments of him have changed. China has even called him "a great young leader who will move the world". This article will assess the stability of the North Korean regime based on the changes that have occurred since Kim came to power.

Changes in & Assessment of North Korea

A North Korea that Accepts Risk

Currently, North Korea is accepting risk. While Kim Jong Il used a

strategy of fortification to protect North Korea, Kim Jong Un is employing an active military strategy to defend it. The sanctions against North Korea and the strategy of increasing pressure that the US is employing are improving the stability of the regime. Kim is trying to bring changes to North Korea through denuclearization negotiations. The country is still a feudalistic society, but Kim is trying to change it into a modern one. But paradoxically, maintaining a feudalistic society provides stability for the regime. There are similarities to the times when Western powers demanded East Asian countries that still maintained a feudal society to open up in the 19th century. The frequency with which Kim is providing local guidance while displaying his anger towards unchanging North Korean officials and organizations is increasing. In spite of economic sanctions, he is flaunting the progress of developments such as the Mirae Scientists Street, Ryomyong Avenue, and Wonsan Kalma zone. What Kim is demanding of North Koreans is to have the resolve for change, so that the sanctions would not be a problem.

North Koreans are scrambling to procure the financial resources for various developments. When Kim orders development, the Party allocates financial resources to each organization. Each organization then distributes the allocated resources to North Koreans. Kim checks each site through on-the-spot guidance and pushes development forward. It should be noted that the focus of such movements is on restoring the North Korean economy's self-rehabilitation capacities. The economy's dependence on the outside world is low. It is a typical feudalistic society. The commercialization of North Korea simply means the distribution method for internal resources is switched from a planned economy to a market economy. It is not that the economic pie has got larger and the market has expanded. Kim wants to enlarge the pie. Because the procurement of internal resources has its limits, he is actively trying to obtain external resources.

To this end, North Korea has been negotiating with the US with its only bargaining chip, denuclearization. If the pie becomes larger, North Korea's dependence on the outside world increases and it will become an opportunity for North Korean society to switch from a feudalistic society to a modern one. The market will exceed the change in method of distributing North Korea's internal resources and the nature of the economy itself will be forced to change. This will fundamentally change the method of assessing the stability of the North Korean regime. Kim accepts these risks.

A Change of the Method of Assessing the Stability of the North Korean Regime Is Necessary

The international community's economic sanctions against North Korea have become a means to obstruct its changes. In order to break through the Kim Jong Il era's fortification strategy, the international community employed a carrot-and-stick strategy and it is still clinging to this way. Many people who have visited North Korea see improvement in the economy to the extent that they question whether North Korea has really had sanctions imposed on it. Of course, this is only after seeing some major cities such as Pyongyang, but if the sanctions have any effect they would impact Pyongyang as well. North Koreans are used to using the country's financial resources through the distribution method of the market. North Korea overcame through the market a situation of economic difficulties stemming from dysfunctional distribution in the past. However, by circulating internally goods that should be exported outside the country due to the sanctions, a situation in which there are more goods is occurring. The sanctions are serving to maintain the stability of the feudalistic society.

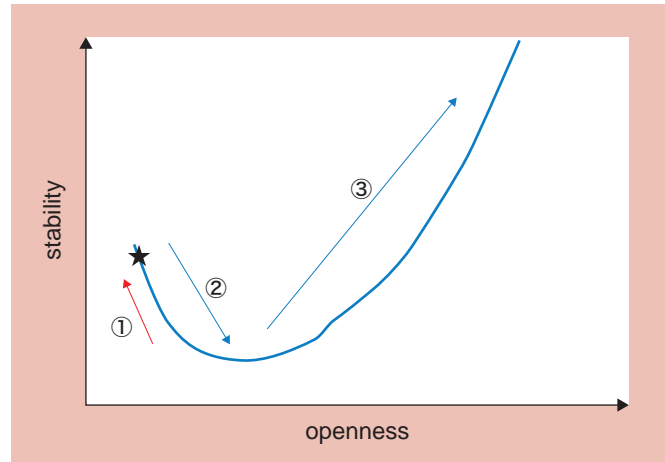
Peace on the Korean Peninsula will start from changes in North Korea. Its menacing behavior towards the world with its nuclear capabilities threatens peace not only on the Korean Peninsula but also in Northeast Asia, as well as globally. This was Kim Jong Il's fortification strategy. As a result of economic sanctions by the rest of the world in order to stop such menacing acts, North Korea raised its level of threat. However, Kim Jong Un switched to an active military strategy for defense. What he is asking for is to become a member of the international community, since he is prepared to stop menacing acts even though possessing nukes. He is trying to increase the North Korean economy's dependence on the outside world.

The US has a toehold on the solution. Both China and Vietnam started to reap the benefits of reform and opening-up since improving their respective relationships with the US. The US is presenting denuclearization as a condition for North Korea to qualify as a member of the international community. Since Kim Jong Un commenced direct negotiations with the US, he has made his intention for denuclearization clear continuously and also stated this intention in the Pyongyang Joint Declaration at the inter-Korean summit last September. North Korea revealed the destruction of the Punggye-ri Nuclear Test Site and pledged the closing of the Dongchang-ri Missile Engine Test Site. It also stated that the Yongbyon Nuclear Scientific Research Center could be dismantled. The US has stated that North Korea must first do everything toward complete denuclearization and has not eased up on sanctions. South Korea and other countries such as China and Russia are of the opinion that a certain level of easing sanctions is necessary, but the US shows no sign of backing down. This is forcing North Korea to maintain its feudalistic society and return to Kim Jong Il's fortification strategy that had threatened the international community. From such a viewpoint, we must change how we assess the stability of the North Korean regime going forward.

This situation can be explained by Ian Bremmer's J Curve.

CHART

Correlation of the stability & openness of the North Korean regime in the J Curve



Note: ★ shows the current position of North Korea.

Source: Ian Bremmer, *The J Curve* (2007), Seoul, Veritas

Bremmer states that in the process of reforming and opening socialist and less-developed closed countries, Zone 2 naturally exists. Applying this analysis to North Korea, the situation can be explained as shown in the [Chart](#). The era when Kim Jong Il's fortification strategy was employed corresponds to Zone 1. If Kim Jong Il favored the opposite of openness in order to maintain the stability of the regime, Kim Jong Un, who employs an active military strategy for defense, is considering the direction of Zone 3. However, in reality, as negotiations take place between the US and North Korea, the emergence of Zone 2 is inevitable. Therefore, if North Korea-US negotiations are to come into full swing in the future, a method to assess the stability of the North Korean regime that will emerge in Zone 2 will be necessary.

Five Core Indicators

The core indicators that express the level of stability and change in the North Korean regime can be identified in two areas: changes in the internal environment and changes in the external environment. Looking at its internal environment, the North Korean regime has seemed to be a feudal absolute monarchy rather than a socialist regime. Socialism has been used as a means of maintaining such a feudal monarchy. If Kim Il Sung established the North Korean regime and Kim Jong Il consistently protected the regime from internal and external threats through fortification, Kim Jong Un leans heavily toward an active military strategy for defense (defense equipped with offensive weapons). The traditional indicators to assess the North Korean regime were selected during the fortification era of Kim Jong Il and they are not suitable for the changes of the times.

That is to say that the international community considered North Korea to be stable if it maintained its current feudal characteristics and unstable if it switched to a modern society. However, now we should consider it to be the opposite. Kim Jong Un is trying to bring

North Korea out of a feudalistic society and lead it to a modern society. However, this has the risk of increasing instability in the regime. Even with the same assessment indicators, the standards to evaluate differ.

Changes in the internal environment are also being pushed by Kim. For changes in the external environment, the core concerns are likely to be changes in the environment accompanying the power struggle between the US and China and it will signify North Korea becoming a normal state within the international community. However, there is a possibility that North Korea becoming a normal state might conversely increase the instability of the regime.

Overall, Kim is directly taking the lead in pushing forward work that could potentially increase instability in North Korea. It is unclear whether Kim is aware of such an outcome. The question of whether normal development of the North Korean regime is proportional to North Korea's political stability remains unanswered. Some hold the view that if Kim's work that harms the stability of North Korea goes too far, there is a possibility that it will whip up a backlash within North Korea. Nevertheless, because Kim is conducting work that increases instability in North Korea, the method by which we assess the regime's stability must change.

The core indicators to assess the stability of the North Korean regime can be summed up in the following five points.

(1) North Korea's Relationship with the US

North Korea's relationship with the US is the core concern of changes in North Korea's external environment. This changes according to the security of the regime that North Korea demands and the degree of denuclearization that the US demands. Before North Korea's declaration as a nuclear power, the US tended to control North Korea indirectly through China and South Korea. However, it has been controlling the situation through direct dialogue with North Korea since 2018. Since the 1990s, North Korea has been attempting to join the international community in various directions. In 1992 it adopted a basic agreement with South Korea, held high-level talks with Japan on eight occasions, and attempted to normalize relations. However, there was strong opposition, with the US bringing up the allegation of North Korea's nuclear development and its withdrawal from the Non-Proliferation Treaty. With the US considering military action over this, the bilateral relationship cooled rapidly (first nuclear crisis). However, as instability in the North Korean regime rose with the death of Kim Il Sung, the US concluded the Agreed Framework with North Korea in October 1994 to suspend the proliferation of North Korea's nuclear technology. The US was to make arrangements for two 1-million kilowatt light water reactors by 2003 as a condition for North Korea to suspend its nuclear development. We know that at the time, the US made this agreement with North Korea on the premise that the regime would no longer exist in 10 years' time.

However, the North Korean regime continued to exist, and in 2002 the North Korean nuclear crisis was reignited (second nuclear crisis). The Sept. 19, 2005 agreement seemingly put an end to the North

Korean nuclear problem, but the crisis reemerged with North Korea's nuclear experiments and has continued until recently. Kim Jong Un's North Korea declared the completion of its development of nuclear weapons and has resumed negotiations with the US premised on denuclearization. The US abandoned its existing method of indirect involvement and has begun directly communicating with North Korea. The North is demanding security guarantees for its regime from the US. For the US, this demand means halting hostile military actions and lifting economic sanctions. In short, it is a demand to create conditions for North Korea to act as a normal state within the international community. In return, it would go into the nuclear order that the US maintains. Comprehensively, this would signify that North Korea would come under the US nuclear umbrella. If the relationship between North Korea and the US progresses to the point of establishing diplomatic ties, it would bring about tremendous change in the regime. North Korea's international standing would transform from a rogue state to a normal one. On the other hand, the North's national power would virtually be reduced to the lowest level. That is to say that the progression of North Korea-US relations will result in making the North Korean regime less stable.

(2) North Korea's Relationship with China

The relationship between North Korea and China has traditionally been equal. Nevertheless, China is the North's most important supporter. The relationship began to show signs of misalignment with the establishment of diplomatic ties between China and South Korea in the early 1990s. In a situation in which the US and Japan had no diplomatic ties with North Korea, its most trusted supporter China suddenly established diplomatic ties with South Korea without prior consultation with the North. At the time, because the results of the economic reform and opening-up of the Chinese market had yet to be seen, there hadn't been a much economic exchange, but they had maintained a close political relationship. The economic relationship between China and North Korea started to become very close around 2010. Japan started to strengthen sanctions against North Korea in 2006 due to the abduction problem and South Korea cut all ties with the North with the May 24 measures of 2010. It was around this time that China's economy expanded dramatically and North Korea naturally started to depend on China.

Currently, North Korea's relationship with China accounts for over 90% of its external economic relations. It is an absolute relationship of dependency. This means that if North Korea remains content under the protection of China, there is no particular problem in maintaining the regime's stability. In order to maintain the North's feudalistic system, it is actually more beneficial to maintain its dependency on China. However, if the international community's sanctions against the North were to be eased and its external relationships become diversified, the North Korea-China relationship would be less close. This will possibly result in increased changes and instability in North Korean society. On the surface, if the relationship between the North and China were to deteriorate, it is possible that the outcome would be the same – the assessment that

instability in the regime would heighten – but in actuality it would not deteriorate, but rather its dependence on China would decrease. North Korea would be able to employ a survival strategy of equidistant diplomacy with the US and China. China would continue to provide the proverbial carrot to North Korea to maintain its influence, and the US would likely present a different carrot to the North to distance it from China. North Korea is trying to take advantage of such a conciliatory game. The less close its relationship with China gets, the more the regime's stability will decline.

(3) Kim Jong Un's Leadership

North Korea has a socialist constitution. The system of this constitution means that North Korea takes the form of a republic. However, it is actually in the form of a monarchical state. It is a feudalistic monarchy in which the king has absolute authority. Kim's authority surpasses the constitution. In such a system, challenges to the absolute authority cannot be accepted. Kim Jong Il was seen as the favorite to succeed Kim Il Sung in the 1960s. After more than 10 years in a power struggle with his stepmother Kim Song Ae's faction, he was officially named successor in 1980. In the end, it can be said that he fought for the position of successor with his stepbrother Kim Pyong Il. Kim Jong Un also fought for power until the mid-2000s with his stepbrother Kim Jong Nam. However, due to the sudden death of Kim Jong Il, he took power without being able to end the power struggle himself. It ended up creating a situation in which kingmaker Jang Song Thaek aimed to become regent. Kim Jong Un brutally disposed of Jang Song Thaek who challenged the absolute authority, and is maintaining a regime of terror worse than that of Kim Jong Il.

The change in Kim Jong Un's leadership is the most important barometer of change in North Korean society. Within the characteristic of a feudalistic monarchy (hereditary monarchy) led by Kim, we must focus on the process of divine right (the power of the king) being separated from political power (republican form) through the process of modernization. The reason for this is because the changes in North Korea being advanced by Kim, in other words processes to be a normal state, can only trigger separation of the king's power and political power. The emergence of political power based on a constitution is the basis of political modernization. It is unclear whether Kim is aware of this. Nevertheless, we must assess the stability of the regime from the perspective that it is inversely proportional to the weakening of Kim's power.

(4) Movement of North Korea's Military

North Korea's military is currently completely under the yoke of Kim and the Workers Party. It is believed that there was a *coup d'état* in North Korea by the new military guards led by Jang Song Thaek in the summer of 2008 when Kim Jong Il suffered a stroke. They were gradually purged before the execution of Jang Song Thaek and with the purge the military reverted to being the military of Kim and the Party. It was Choe Ryong-Hae who orchestrated this. During the military-first politics of Kim Jong Il, the North Korean military had

numerous vested rights, but Kim Jong Un diverted the military's vested rights to the living of the people. It is not too much to say that the North Korean military currently only has the rights necessary to maintain it. Because the market to sell military goods is cut off internationally, simply put, the military has become extremely poor. Up to now, the military had enjoyed privileges to be able to maintain a separate economic power called the second economic category. Since Kim came to power, the military has lost most of its privileges and its dissatisfaction is growing. Furthermore, Kim is attempting to curtail the enlarged military. Recently, due to a military agreement between South Korea and North Korea, the military's position is further declining.

Such movements have the possibility of aggravating the military's concern about Kim's political power and the possibility to attempt a change in political power (a *coup d'état*) cannot be ruled out. This is due to the military no longer being able to maintain itself on a state-level distribution of resources alone and being forced to explore an independent means of survival. There is a possibility that the economic activities of the military will expand along with changes in the external environment. This will lead to the military expanding its independent power, increasing the relative possibility of independence of political power. Additionally, in the process of transitioning to a republican form through a constitution, not only is there a possibility of the military's political neutrality or independence emerging, it could also be an opportunity for the military's traditional force to enhance itself. Therefore, the independence of the military will be inversely proportional to the stability of the North Korean regime.

(5) Trends in North Koreans' Lives

Public sentiment is divine will. Of the core indicators that affect the stability of North Korea, the trends in North Koreans' lives should always be included. North Korea maintains a planned socialist economy, but this virtually fell apart during the famine of the 1990s. North Koreans were used to daily necessities being provided at low prices and usage expenses, residence expenses, and education expenses of social overhead capital. They simply had to provide labor. However, at the same time as the planned economic system failed, North Koreans were forced to resolve their living problems on their own. Their solution was the market. In the early stages, the market expanded as a barter system. Gradually, currency became involved and in order to maintain the stability of the value of the currency, it was replaced by foreign currency (US dollar, Chinese yuan, etc.). The biggest interest of North Koreans was how to earn more. As long as they had money, they wouldn't have a problem finding food and they could even use electricity. They could become the proprietor of a company and they could place their children in good schools. They could even make opportunities to go abroad.

The North Korean authorities have repeatedly gone back and forth from allowing the spread of the market to a limited extent to suppressing it. However, since Kim came to power, the market has been officially recognized. Each company earns its own money and

laborers who work for each company are responsible for their own living. Cooperative farms have also been given back the right to dispose of the goods they produce themselves. Cooperative farms existed only in name and since 1979 farmers had been pushed to become laborers, receiving monthly cost-of-living allowances in effect. Naturally, the decline in productivity of cooperative farms could not be avoided and farmers concentrated on cultivating vegetable gardens and terraced fields in which they could produce the goods that belonged to them. As the situation worsened during the North Korean famine, the dramatic decline in the productivity of farms was inevitable. Now, cooperative ownership is permitted in effect. Farmers are devoting themselves to cooperative farms. This is because they are allowed to take home the fruits of their labor. The goods produced by companies and on farms are traded in the market. Sole proprietorships are also increasing.

However, because the current situation is mainly commercialization utilizing national resources, its expansion is limited. North Korea shifted from a planned economy to a market economy, but the living of North Koreans remains poor. This is because the economy is not growing with the inflow of new funding. It is simply a reconstruction of part of the hardware broken in the past and changed to a form of distributing it in the market. The work that Kim is pushing to change North Korea from inside will provide opportunities for the economy to grow through the inflow of new foreign resources. A change will occur in the negative accumulation method, which will bring about change in North Korean society. A substantial modernization process will be realized in the lives of North Koreans. With the expansion of mobile phone usage, enhancement of a commercial system, expansion of business sizes, and the birth of an affluent demographic, among other things, North Korea is bound to form a new social network which will, in turn, be the driving force to change society. If the lives of North Koreans improve, the stability of the regime will weaken.

Conclusion

The stability of the North Korean regime is rooted in the continued maintenance of a feudalistic monarchy. If the feudalistic absolute monarchy collapses or changes, during that process the regime will become unstable. Kim is advancing the reform and opening of North Korea through his own absolute power. He is taking action that conflicts with the stability of the regime. From such a viewpoint, the international community's blockade of North Korea is actually preserving the stability of the North as it is a factor that suppresses Kim's efforts for reform and openness.

Opening a way for change begins with North Korea-US relations. Improvement in the relationship with the US will provide the environment for North Korea to transform from a special state to a normal state. Unlike past US administrations, the administration of President Donald Trump is prepared to offer such an environment. If it could not speed up such an offer due to the midterm elections, the Trump administration can concentrate on and accelerate dealings

with North Korea now. If bilateral relations remain at the same level, the North Korean regime will be unable to change and it will maintain its stability. Because its dependence on China will increase, its stability will also improve. Kim's leadership forces change without being able to provide new things so it will reach its limit, but since there is no driving force to change the political regime it will remain stable. The military will also be forced to remain the military of the Head of State and the Party. The commercialization of North Koreans will likely expand, but since a substantive expansion cannot be expected the market will not have the power to bring about even more change or instability. Therefore, if North Korea-US relations remain at the same level, the regime's stability will increase.

On the other hand, should bilateral relations develop, North Korea will become a normal state, and at the same time its international standing will fall. That means it will actually weaken the stability of North Korea. There is a possibility that after North Korea's weakening continues until it enters into a stage of full-blown economic development, it will gradually strengthen its national power. This would be the so-called J Curve effect. Its dependence on China will decrease and the stability of the regime will also weaken. Kim's leadership will strengthen in the early stages, but it will likely gradually decline. If his leadership strengthens, North Korea will be stable, but if his leadership weakens, it will become unstable. There is a possibility that the independence of the military will gradually increase. The military is negative about the regime's stability. North Koreans' lives will improve and this will also affect the regime as a destabilizer. Such a process will repeat itself over the next few years and assessments of the North Korean regime will also change repeatedly. At present, the regime is stable. This is because it has yet to ride the waves of change.

Kim wants to negotiate with the US using denuclearization as leverage to create a new North Korea. He is pushing forward changes in spite of the fact that they will make the regime less stable. Therefore, we must aid Kim. Currently, he is the only person who can change North Korea and it is not an exaggeration to say that if he cannot do it, there is no other way. The surrounding countries can help him to escape from isolation. It is not even necessary to overestimate him. However, doubting and restraining the only alternative could hinder progress. Kim is appealing to us to believe in him now. To hastily pressure North Korea now to come forward with both hands in the air will only aggravate the situation. The higher the hurdle the international community sets that Kim cannot accept, the lower the possibility for a resolution. Kim is young and patient. If we do not act now, it will only serve to allow North Korea to improve its nuclear weapons and raise the level of threat against the international community. There is also the possibility that South Korean President Moon Jae In will fret about the situation and leave it up to the next administration.

JS

Dr. Yong Sueng Dong is CEO of Oriental Link Inc. He was previously a senior researcher of Samsung Economic Research Institute (1989-2015) and a member of the Council of Policy Advisors to the President of the Republic of Korea (2009-2012).

Perspectives on Global Risks: the 2nd JEF Global Risk Symposium 4

North Korea: Myths & Reality

By James E. Hoare



Author James E. Hoare

Introduction: North Korean Experts Are Rare Birds!

First a word of caution. Kim Jong Il, the leader of North Korea from 1994 to 2011, told a group of visiting journalists from South Korea in 2000 that anybody who presented themselves as an expert on his country was a fool. Having studied the North since the mid-1970s, visited several times, and lived there for 18 months in 2001-2, I am inclined to agree. Just when it seems obvious how things work in the country, a new twist throws you off balance and the certainties of yesterday are swept aside. It is not just me. The number of predictions about the future policy or the chances of survival of the country that have been proved wrong is legion. North Korea is adept at allowing visitors to see only what it wants them to see. It is not impossible to get around this. To do so, however, you must keep your eyes and ears open. Do not take things at face value. Probe as much as you can but do not be rude and do not break the rules. What would cause no problems in most countries may not be treated with much tolerance in North Korea as some have found to their cost.

Demonizing Is Easy

Demonizing North Korea is easy. For many commentators, it is the default mode. They do not analyze the country nor try to understand it. They *know* that it is evil, or that its policies are wrong. The most famous exponents of this view were probably US President George W. Bush and his senior colleagues, who famously did not negotiate with evil, but, they said, destroyed it. Unfortunately for them, the need to deal with the reality of the North Korean nuclear program proved stronger than the unwillingness to negotiate. But Bush and his men were by no means alone. North Korea arouses strong emotions. The strength of those emotions can spill over into vitriolic exchanges on social media, in conventional media and even in academia. Nuance disappears, black and white prevails.

The process begins early. Few use the country's official title – the Democratic People's Republic of Korea – or even the abbreviation DPRK. Some avoid the official usage because they do not want to give legitimacy to a state that, in their view, has no right to exist. To them, there should be no division on the Korean Peninsula. Korea was one for over 1,000 years. It should not be divided. Even the Japanese colonial administration did not do that. For many people

with little knowledge of history, it is the North that is blamed for the division. But the process that saw the emergence of two separate states on the peninsula started long before the Korean War. Outside powers – the United States and the Soviet Union – carried out the initial division. Their intentions were initially limited to taking the Japanese surrender. The Cold War intervened, and the two powers oversaw the development of separate states on the peninsula. The leaders of both states wanted unification. Each denied the other's right to existence. (To some degree, they still do, summit meetings notwithstanding.) Belligerent noises and threats came from both. The North struck first. Although the smaller in population, it had the means to do so thanks to the Soviet decision to give it an army. The US made a different decision. South Korea had a lightly armed super police force that proved no match for the forces from the North. If there had been no outside intervention, the problem of Korean unification would have been solved in 1950. But intervention there was, and the war settled nothing. Now two even more hostile states faced each other across the division line, initial hostility made worse by the bitterness of war.

Relations between the two Koreas were not helped by the rest of the world. During the war, the United Nations had set up a commission – the UN Commission for the Unification and Rehabilitation of Korea (UNCURK) – that pledged to bring about the “rehabilitation and reunification of Korea” which followed on from its 1948 declaration that the South was the “only legitimate government on the Korean peninsula”. Although the wording did not say that it was the *only* government on the peninsula, it acted as though that was what was meant, a position that Western countries went along with. Not until the early 1970s, with the first substantive contacts between the two Koreas since the Korean War and the winding-up of UNCURK, did the position change and Western countries begin to open diplomatic links with the North.

From the war onwards, the default mode outside the North for referring to the two Koreas was “Korea” for the South and “North Korea” for the North. The implication, clearly, was that the South was the real Korea. (Something similar happened in the case of divided Germany and Vietnam.) The North was odd, an aberration. Of course, there were ways in which the North contributed to this image. It was a tough totalitarian regime that maintained a fierce independence. Few visited it. Even among the socialist states, it was seen as a difficult partner; it was grasping and needy and it went its own way as far as it could.



Photo: Copyright 2011 J E Hoare

Pyongyang September 2018 - The show city



Photo: Copyright 2011 J E Hoare

Pyongyang Autumn 2001 - Also a show city, perhaps

The Odd Place

The North was seen as a threat but also as a strange, bizarre place. Both themes persist. Exaggerated claims about its military might abound. Its rhetoric is indeed ferocious. Yet it is in reality cautious, behaving like many small states surrounded by much bigger states, all far better equipped. When not dealing with its alleged threat to world peace, most press reports on the North are dominated by what is seen as its weird nature. In recent years, these themes have included the claim that the North believes in unicorns, or focused on the strangeness of the leader's hairstyle, while in July 2016 the British newspaper, the *Daily Mail*, reported that Kim Jong Un was devastated by international sanctions on luxury goods because of his love of Swiss cheese and watches. We have had giant rabbits, catfish and a regular diet of weird leaders doing odd things – all are jumbled together whether true or not. To many it is the worst country in the world in a host of areas from human rights (yet look at some African or Middle Eastern countries) to architecture (most former Soviet cities could compete on that score).

But It Will Not Just Fade Away

A persistent theme is that the North is doomed to collapse any day now. Even the failure of this to happen so far does not stop the predictions. As with those who believe the end of the world is near, if it does not happen at the predicted time, it will certainly do so next time – or the time after that. In 1949, the British Cabinet noted a report from the Seoul Legation that the North Korean army was disaffected, there was widespread starvation in the country, and that the regime was on the point of collapse. Forty years later, the British commentator Aidan Foster-Carter wrote, following the collapse of the Soviet Union, that North Korea would be next, if not in two years, certainly in five. When that did not happen, he twice more gave it five

years, then stopped predicting.

The fact is that the North has survived despite war, invasion, the longest sanctions regime in the world, economic collapse and the end of its main trading partners, famines, floods and drought. Soviet forces had liberated the north of the peninsula in 1945. The Soviet Union may have enabled the Communist forces to dominate the area and undoubtedly played a major role in the establishment of North Korea. Dependence on Soviet guns to maintain its position was ended by 1949. It was China that saved it during the Korean War, not the Soviet Union. Unlike the states of Eastern Europe, from the 1950s onwards it moved to a more independent position, drawing as much on Korea's historic past and even on the practices of the Japanese colonial administration to give the state legitimacy. The collapse of the Soviet Union, which caused the collapse of Communism in Eastern Europe, worried the North, but it did not have the same effect on it as it did on the European states.

Unification?

The complication for North Korea is in some ways similar to that faced by the German Democratic Republic (East Germany) in 1989-90. Once the Soviet leader Mikhail Gorbachev made it clear that the Soviet Union would no longer support their Communist leadership, states such as Hungary or Poland could change government without fear of challenge. East Germany, however, had until 1945 been part of a unified Germany. Its people had been exposed to the German Federal Republic (West Germany) through radio, television and direct contact. Many wanted a return to a united Germany. There was some opposition from other countries that had fought Germany in World War II and feared a united Germany would be too powerful. This was overcome, and the two German states merged into one. But an East-West divide persists. Although they had not fought each other, as the Koreans had, divisions had grown up between them that proved hard

to overcome. East Germany had a smaller population than the West. Its economy, although widely regarded as the strongest in the former Soviet sphere of influence, lagged well behind. Its industries were old fashioned compared to the West. In some areas, it is true, it was ahead. Social security and health provisions were more evenly distributed in the East, based on need rather than the ability to pay. There was one other problem in the relationship. Suspensions of the East in the now dominant West led to many job losses amongst those who had worked for the East German regime. Some were tried and sentenced for having carried out state policies.

All this resonates with North Korea. The elite are aware of what happened in East Germany, in Libya and Iraq. Some of that group are well aware of the voices in South Korea that call, not for reconciliation, but for revenge. At best the senior leadership sees loss of status and loss of jobs. At worst they see the prospect of being executed or imprisoned. It is preventing this outcome that keeps them loyal to the system and its leader, not the bottles of brandy or even the fast cars that Kim supposedly gives out from time to time. To quote an old proverb, they hang together – stay united – or they hang separately.

Even if the worst did not happen, the North Korea leaders have had clear indications over the years that there is a quasi-colonial attitude towards their country in the South. This was made abundantly clear during the Lee Myung-bak and Park Geun-hye presidencies. In South Korea, companies and the government see the North, if not quite virgin territory, as ready for exploitation. The South will help with developing existing resources and looks forward to exploiting a literate and obedient workforce. This does not bode well. Many will know how hard it is for those from the North who have gone to the South to fit in, whether they are from the non-political classes or from the elite.

In the South too, there are doubts about the idea of reunification. Back in 1989, the South witnessed a brief surge of enthusiasm for

the idea, as Eastern Europe was transformed. It was not long, however, before doubts began to creep in. Having only just begun to reap the benefits of the economic development since the early 1970s, many looked askew at giving them up to pay for sorting out the North. The famine years of the 1990s made things worse. It became clear that the North was no paradise. Most of its much-vaunted achievements were well in the past, indeed if they had ever existed outside the pages of glossy magazines. Costs of reunification in Germany proved far greater than anybody had expected.

Dealing with Reality Not Dreams

Unification thus seems unlikely in the foreseeable future. Perhaps one day, when all those who experienced the Korean War years have passed on, and when the two sides get to know each other better, it may happen. But there is a long way to go. So, there is little choice but to deal with the North as it is, not as one might hope that it might be.

Here it would help if one got away from the overheated discussions on the threat from the North. Nobody would deny that the North has been an irritant to its neighbors, but beyond the South it is not a threat to their existence. Even in the case of South Korea, 2019 is not 1949. The balance of power has shifted in most matters to the South. Even the possession of nuclear weapons does not give a real advantage. The use of such weapons on the peninsula would not only lead to massive retaliation but could have an effect on the North itself.

Photo: Copyright 2004 J E Hoare



Militarism – Army First poster, Pyongyang

Photo: Copyright 2001 J E Hoare



Less militarism – army and navy at Kaesong, Autumn 2001

A real threat to the US or, even more unlikely, to Europe, seems far-fetched. Former US Secretary of Defense William Perry pointed out the huge discrepancy between the North and the US. If the former were to use any of its tiny nuclear arsenal against the US, it would face a counterattack that would certainly mean the end of the regime and possibly the complete destruction of the country. This would be President Donald Trump's fire and fury with a vengeance. And while the North has shown that it will practice brinkmanship, it has not shown itself suicidal.

Yes, Kim Jong Un has made threats and shown warlike scenes. The armistice agreement has been denounced and declarations of war are regularly flung about. But nothing happens. The North still respects the armistice. There have been so many assertions that this or that development is an act of war that it is hard to take them seriously. Kim in the control room would look more authentic if the computers were plugged in and the telephones were connected. Or even if the map on the wall did not look suspiciously like a blown-up airline route map rather than the rocket trajectories against the US that it claimed to be. What is forgotten is that such pictures are primarily for internal consumption, designed to show a leader in control and standing up to the enemies of the North.

You Cannot Trust Them!

That North Korea does not stick to its treaties and agreements is by now a well-established mantra. It is certainly a tough negotiator. Like other East Asian countries, it is usually more attached to the general spirit of a document than to the precise text. If, however, it is to its advantage to be more precise, it will be. What its negotiators do expect is that there will be equal and mutual advantage. If there is backtracking or a lack of reciprocity, to the North that excuses it from meeting its side of the bargain. Essentially that is what happened over the 1994 Agreed Framework. The North believed that it had stuck to the agreement since it had capped and halted its plutonium-based nuclear program. That was all that was covered in the agreement. When the US did not seem to be pursuing its side of the agreement – by 2002, it was estimated that it was eight years behind schedule, while the new George W. Bush administration was showing signs of hostility – the North began pursuing an alternative route towards its original goal. If the administration had wanted, it could have raised its concerns quietly under the terms of the Agreed Framework, as the administration of President Bill Clinton had done. But eager “to confront evil”, it chose a different path. It was not wise since it opened the way to the situation we have today. Yet the lesson was not learned, and agreements continued to founder because of a wish to add new conditions or to change the terms.

The United Kingdom had a more successful, if minor, experience. In the document establishing diplomatic relations signed in December 2012, it was clearly stated that we would be allowed secure communications as we did everywhere else. When I got to

Pyongyang and raised the issue, I was told that North Korean law would not permit this. We could have telephone and fax communications, but no embassy or international organization could have access to the Internet. The World Food Programme, whose staff travelled all over the country, was particularly anxious for improved communications but had been regularly turned down.

In our case, the standoff continued for a year. I raised the issue on a regular basis, and North Korean officials visiting London were also bombarded with the same message. As I drew near the end of my time in Pyongyang, I thought I would try a different tack. Since I was going straight into retirement, I had nothing to lose! So one evening at my apartment where they had come for dinner, I told the European Department that they were running the risk that I would recommend to London that we abandon the idea of a resident embassy since we could not work as we were. The usual objections were aired but, perhaps by coincidence, a week later I was called aside at a party and told that we could have our communications. The Note authorizing this arrived the following day. As it happened, the budget was overspent so there was no change while I was there. But my successors benefitted as did other embassies and international organizations. And there has never been any attempt to go back on the agreement.

What Should Be Done?

For most of the period since 1945, North Korea has been seen as an awkward nuisance at best or as a potential source of trouble at worst. Rather than engage with it in the hope of effecting change, the way to handle it was to isolate it. In the light of where we are today, I find it hard to argue that such a policy was unsuccessful, especially given what happened during the short period (1998-2002) when South Korea and the US followed a different approach. Yes, it cost money but there were real achievements. A nuclear program was capped. The South began to build a new relationship with its neighbor, as did the US and many other countries. Even Japan began to benefit. Nobody got all they wanted from the better relationship, but it was the start of a process. If the momentum had been kept up, who knows where it might have led? The developments in 2018, the moving away from the threats and counter-threats of 2017, offer a glimmer of hope. Moving away from sanctions would benefit ordinary North Koreans as would the development of trading and other links. Rather than isolating the North, some of the effort that goes into implementing sanctions would be better used in providing training and opportunities to see how things are done elsewhere. Kim Jong Un has shown an interest in getting away from confrontation. Perhaps we should build on that.

JS

Dr. James E. Hoare has a Ph.D. in Japanese History and joined the Research Department of the British Foreign Office in 1969. He was posted to Seoul, Beijing and Pyongyang. He now writes and broadcasts.

Future Design Research: the Issues

By Keiichiro Kobayashi



Author
Keiichiro Kobayashi

Future Design Goals

One of the working goals of Future Design (FD) is to bring players into the current political decision-making process whose job is to represent the interests of future generations. A typical illustration of this approach can be observed in a psychology experiment presented in “Future Design – Evidence and Insights from Participatory Deliberations” by Tatsuyoshi Saijo and Keishiro Hara, *Journal of Japan Society on Water Environment*, 2017, Vol. 40, Issue 4). In 2015, we were asked to compile a long-term FD plan (for the current point in time through 2060) for the town of Yahaba in Iwate Prefecture. Residents were divided into two groups: one to represent the current generation and the other to take the position of a future generation, specifically of the year 2060. Each group held deliberations to devise long-term future plans.

In brief, we held a role-playing game – a type of psychology experiment – with a group representing the people of Yahaba in the year 2060. The group representing the current generation drew up a plan within the context of current limitations and issues, while the group representing future generations created a plan designed to consciously draw on regional advantages to solve difficult issues. These results highlighted clear differences in approaches and opinions.

Particularly interesting were the deliberations on water and sewage charges. Yahaba waterworks had a fiscal surplus at the time of the role-playing experiment. The group representing the current generation agreed that the surplus should be returned to residents in the form of lower water and sewage costs. In contrast, the group representing future generations were looking at waterworks in 2015 from the perspective of the year 2060. In their deliberations they were extremely conscious of the fact that the water pipes and other water supply facilities would need to be replaced during the period from 2015 to 2060. Because a huge capital outlay would be required to complete the work, they decided that water and sewage charges should be raised for residents, regardless of the surplus, to cover these costs. The deliberations had so much of an impact that the town of Yahaba in fact decided to raise water and sewage charges.

It is worth noting that the researchers involved in this project believed that this FD experiment engendered a significant psychological change in the residents assigned the role of the future generations. In interviews conducted in Yahaba six months after the experiment, the group representing future generations stated “We

were able to grasp the big picture and reconcile the interests of the current and future generations” and noted that they were very pleased with what they viewed as progress. These changes indicate the possibility that people engaged in the study could change their thinking processes.

Prof. Tatsuyoshi Saijo, funding director of the Research Institute for Future Design at Kochi University of Technology, calls these individuals “imaginary future persons”. The ultimate goal of FD is to create political players comprised of these imaginary future persons (such as a “Ministry of the Future” in the central government or a “Future Planning Section” at government offices) in order to bring them into the political decision-making process; and also to render these organizations capable of impacting current political decision-making from the perspective of future generations.

How Does FD Work?

For researchers in the field of FD, there are two issues in particular to mention. First is the question of whether a governmental organization such as a Ministry of the Future run by “imaginary future generations” would actually be workable. That is, even if we create an organization like the Ministry of the Future, would it really be a feasible undertaking since it is in fact run by people of the present? Would these individuals truly operate in the interests of future generations?

The results of the social experiment described above, however, showed that the participants were actually able to become imaginary future persons in their own minds. If the concept of creating imaginary persons could be generalized and the viewpoint of the people representing future generations could truly change, an organization such as the Ministry of the Future could potentially work well. Because the staff of the Ministry of the Future would act on behalf of future generations, they would effectively take on the character of the imaginary future persons.

The hypothesis here is that if people are assigned the responsibility to make better choices, we can casually compare this to the ideas emphasized by Adam Smith in his *Theory of Moral Sentiments* (1759). The individuals assigned the role of spokespersons for the people of the future could win the approval of their colleagues by fulfilling this responsibility.

The satisfaction garnered through the approval of colleagues helps to solidify the idea that representing future generations is itself a

form of justice. This belief would then more strongly be supported and maintained among the staff of a political organization comprised of imaginary future generations. In another similarity to Smith's *Theory of Moral Sentiments* the individual is transformed into an "impartial spectator". If this could actually occur, an organization run by imaginary future persons could truly work on behalf of future generations, at least subjectively.

To prove our hypothesis, it is necessary to scientifically clarify the self-formulating mechanism of imaginary future persons described here by statistical analysis in the fields of neuroscience and psychology. Researchers of FD are considering, for example, a future design social experiment examining the brain using MRI imaging to assess changes in brain activity.

Justification by Political Philosophy

The second issue is whether the establishment of a new organization run by imaginary future generations (such as a Ministry of the Future) could be justified under a democratic government. If we can scientifically confirm that we can generate a stable supply of imaginary future persons, we can say with certainty that new systems such as the proposed Ministry of the Future will help to improve circumstances for future generations. However, to create this kind of new system – and garner broad public support – it needs to be justified under our current democratic system. For instance, if we move to create a Ministry of the Future, it will lead to limitations on the rights and benefits of the current generations of people, though there will undoubtedly be dissenters.

In another example, the Demeny voting system (in which children are given voting rights but their parents or guardians vote on their behalf) has been suggested as a way of voting that would better reflect the interests of future generations. Resistance to the idea is deep-seated, however, amongst legal and political scholars arguing that the very basis of democracy is "one vote per person". If the sole reason for making such changes to our government is to benefit future generations, the said changes will not necessarily be popular with a wide swathe of people spanning diverse backgrounds.

To garner broad-based support from the public, political philosophy rationalizing and justifying the installing of imaginary future generations is key. By invoking the social contract theory of John Rawls' "Veil of Ignorance", we can argue the point. If people can agree to a political system comprised of people imagining

themselves unaware of what their own position would be in a new society (physical and mental capacity, wealth, etc.), that is, obscured by a Veil of Ignorance, then the system will be fair and just. According to this theory, under the Veil of Ignorance, if people fear that they might be born in the most unfortunate circumstances, then they will agree to a political system where there would be the greatest positive impact on people in unfortunate circumstances.

This theory holds that where there will be disparity in a new society – particularly in regards to income and assets – compared to a set of conditions where there would be no disparity, the people would make choices for the benefit of the most disadvantaged. Rawls called this theory the "Difference Principle". Citing this principle, Rawls argued that extensive social insurance systems in developed countries following World War II were justified, rationalizing the welfare state according to political philosophy. Under the Veil of Ignorance, if people agree to social security systems maximized for the benefit of the disadvantaged, they agree to policies in line with the social welfare state. Since social welfare systems chosen under the Veil of Ignorance are justified, it follows that social security programs are justified as well. This is Rawls' logic.

The Imaginary Future Generation as a Social Contract

The second issue is the justification for establishing imaginary future generations in the context of political philosophy. I will explain how it might be chosen as a social contract under Rawls' Difference Principle.

When a group of individuals are about to enter into a social contract – assuming that they are obscured by the Veil of Ignorance and therefore unaware of what kind of circumstances they will be born in – they fear that they will be among the most unfortunate (a generation subjected to damage caused by conditions such as global warming and financial collapse). Therefore, in order to lessen the suffering of generations of people who would endure such a fate, the representatives of the different generations agree to the "Just-Savings Principle", under which the people of the different generations save a fair amount of resources for future generations. This rule states that each of the different generations agrees to control the expansion of public debt and implement fiscal restraint. The Just-Savings Principle is agreed upon under the Veil of

Ignorance. There is, however, more to the story.

The fact is that even if the Difference Principle is agreed upon under the Veil of Ignorance, in our current democracy – where imaginary future generations do not exist – once the Veil of Ignorance is removed and the course of history resumes, any said agreements will inevitably break down. Under the Veil of Ignorance, people fear that they will be part of the generation plagued by the most disadvantageous circumstances, making decisions accordingly. In reality, once the veil is removed, people realize that they are not in fact the most disadvantaged of the population, at which point they tend to work for their own benefit. Instead of saving a certain amount of resources for disadvantaged future generations, they decide that consuming said resources during their time is more advantageous.

This means that a significant level of greed will arise because people will wish to break the promises made under the Just-Savings Principle. What is still more important here is the fact that even if the people of the present break promises made under the Just-Savings Principle, there is no “penalty” applied to future generations. Even if the people of current generations break promises to the people of the future, since these individuals are still children or have yet to be born, they are unable to “punish” the people of the present. As a result, there is little reason for the current generations to hesitate to break the promises made under the Just-Savings Principle. Any such promises are therefore easily broken.

To summarize the above, though agreement may be reached regarding the Just-Savings Principle under the Veil of Ignorance, once the veil is removed the promise of Just-Savings is broken. Further, the issue is time-inconsistent. Agreements may be reached under the Just-Savings Principle, only to be subsequently broken.

Compared to the work of Rawls, which states that a social contract is entered into under the Veil of Ignorance, clearly any agreements made between generations under the Just-Savings Principle will be time-inconsistent. The social security system justified by Rawls is essentially an issue of redistribution among the same generation. Let’s take social welfare as an example. Under the Veil of Ignorance, people agree to the creation of social welfare systems, but once the veil is removed, they then learn whether they will be among the wealthy or poor classes.

Those who join the ranks of the wealthier classes tend to lean toward the abolition of social welfare systems, yet this is difficult to achieve. This is because the poor classes exist at present, in contrast to future generations, where they do not. If the wealthy classes were

to recommend that social welfare systems be abolished, the poor classes would immediately block such a move. Because poor people greatly outnumber wealthy people, the wealthy are unable to abolish social welfare simply because they wish to do so – at least under a democracy.

Tools to achieve time-inconsistent Just-Savings work to create imaginary future generations. If, as noted above, an organization of imaginary future generations is created, it will actually work for the benefit of future generations, leading the people of the present to a political decision-making process that matches the interests of the people of the future.

Under the Veil of Ignorance, because the people are aware of the above, they are in agreement with the idea of creating a system of imaginary future persons in order to help alleviate the poverty of the most disadvantaged people of the future. Since the installation of imaginary future generations is agreed upon under the Veil of Ignorance, we can call it a fair social contract.

In addition, the organization of imaginary future generations will not be abolished by the people of the present. This is because the perpetuation of such an organization itself enjoys sufficient support from flagging altruistic behavior across generations of the people of the present. If an organization of the people of the future is sustained, the work of that organization will impact the decision-making process of many people of the present day. The result is that distribution of resources falls in line with the Just-Savings Principle.

FD is not social science. Harboring the seeds for revolutionary human development, it works through multiple areas of study including neuroscience and thought as well as philosophy. Expectations are high for interdisciplinary, diverse research in the field.

JS

Dr. Keiichiro Kobayashi has experience in the economic policy-making process as a former government official at the Ministry of Economy, Trade and Industry. His interest in economic research led him to join RIETI and pursue an academic career. His current interests cover areas such as innovation and income inequality.

Future Design Applied in the Town of Yahaba in Iwate Prefecture

By Ritsuji Yoshioka



Author Ritsuji Yoshioka

Introduction

The waterworks of Yahaba in Iwate Prefecture, launched in 1966, now service 96% of the district's population. However, 50-plus years have passed since the facilities were built and they are deteriorating. So it is clear that significant future work will be required to replace them.

Despite their importance, waterworks are paradoxically the kind of infrastructure that people tend to take for granted. As long as they continue to benefit from water services, consumers are unlikely to consider upgrading and earthquake-proofing decrepit water pipes as a high-priority project. This renders it a difficult task to garner the understanding of the public required to raise waterworks fees, which should logically be the revenue source for pipe replacement projects.

In addition, amidst a socioeconomic environment where the nation's population is declining, it is important to create a scenario where people are aware of the crucial role that waterworks play in the local area – the goal being to ensure that waterworks are a service that everyone can continue to access into the future. To achieve this, residents should have a good grasp of the issues, including the question of how to pay for renovation work. They must not only agree on waterworks policy but also consider structures such as water pipes in terms of how many centuries they will last instead of how many years. It is not sufficient simply to optimize the current system: we also need to think about the interests of people who will be using waterworks in the future.

Waterworks Needs of the General Population

Based on the idea of multilayered participation [comprised of 1) public comment procedures, 2) outreach methodology, 3) questionnaire surveys, and 4) direct participation by consumers – for purposes of this paper called “waterworks supporters”], we employed outreach methodology to assess the needs of the silent majority.

Outreach involves going to the target audience in order to better communicate with them. Instead of a questionnaire with pre-devised questions, Yahaba opted to gather information from 1,000 individuals on their current needs. We received a total of 954 answers. Our results have clearly indicated that respondents wanted lower rates, but at the same time continued to demand safety of waterworks systems as well as good-tasting water.

The Waterworks Social Dilemma

From a financial perspective, it is natural for individual residents to want lower waterworks rates. If everyone thought this way, pressure would mount for lowering prices and the government would have no choice but to authorize a lower fee structure. The issue is that if the majority of individual residents were to consider only their own benefit, revenue sources would prove insufficient and projects to replace aging facilities would fail to move forward. This would mean a greater safety risk over the long term, which would in turn result in a greater financial burden. Paradoxically, the public benefit of waterworks safety would also be lost over the long term.

The “social dilemma” referred to here is as follows: actions that compromise public interest over the long term benefit individual interests in the short term (“uncooperative behavior”), while actions that compromise individual interests over the short term benefit public interests over the long term (“cooperative behavior”). One of the two must be chosen over the other (*Prescription for Social Dilemmas* by Satoshi Fujii, Springer, 2017).

Not only do needs for waterworks, as perceived by the general public, fail to consider the interests of future generations, but in fact the current generation is unwittingly choosing uncooperative behavior, which also means loss of profit for the waterworks sector at present.

“Waterworks Supporters” Workshop

Next, we look at the question of how we can solve this social dilemma by way of changing attitudes through a Waterworks Supporters Workshop. This workshop is an opportunity for people to directly participate in the formulation of policies that affect them. At the first workshop, the format was the same as for our outreach initiatives. People were asked to simply give their opinions, though no specific questions were asked. At this time we arrived at the same result as above. Respondents wanted lower rates but at the same time continued to demand safe waterworks and good-tasting water.

At Yahaba, in order to ensure that deliberations held during the workshops covered the important topics, the workshops featured hands-on activities including tours of water purification plants and tasting sessions. The goal is for attendees to truly get a sense of what the waterworks sector is all about. Workshops from that point onward involved deliberations focused mainly on audio-visual

material. Content was then recorded using facilitation graphics, which are utilized at subsequent workshops to make the deliberation process more visible.

Materials presented at workshops should be very specific and easy to understand. At Yahaba, in addition to information gained by asset management initiatives by utilizing the information for the assessment of the waterpipe project, they are trying to improve visibility on potential impact and risk factors. In thinking about the question of renovation of facilities, we considered the issue of whether preventive maintenance or corrective maintenance would be the optimal choice, as well as what risks would be present in the end.

As the deliberations progressed, the focus became how to maintain safety as well as customer peace of mind, and particularly establishing criteria for acceptable risk levels. Everyone agreed that the cost burden was justified due to the indispensability of waterworks. As more sessions were held, more “waterworks supporters” came to understand the situation to the effect that they even recommended an increase in waterworks fees. In other words, instead of putting short-term individual needs first, they decided on cooperative behavior to ensure long-term public benefit – thus solving the “social dilemma”.

Solving the Social Dilemma

There are two reasons why the “waterworks supporters” decided on the cooperative behavior route in contrast to the general population: 1) they had sufficient information needed to properly consider and make decisions on waterworks, and 2) they employed two-way communication between themselves and the waterworks sector.

Since the general population lacks the information required for decision-making, they naturally choose what is most beneficial to themselves. Because people who use waterworks simply assume that their water is safe without giving it much thought, they do not tend to make choices that would raise the cost burden, even if it means improving safety.

In contrast, because the “water supporters” employed two-way communication in free discussions utilizing hands-on learning techniques as well as visual materials, all of the participants decided on collaboration with the water and sewerage departments. In addition, water and sewerage department surveys had identified the highest priority issues as safety and replacement of decrepit pipes.

The public interest was chosen instead of lower water and sewerage charges, which would benefit the individuals instead of the public, thus resolving the dilemma.

These recommendations are the result of a significant change in awareness levels of our “waterworks supporters” brought about by their participation in the workshop. Serving as a reference for other municipalities, a proposal was made to add ¥200 to waterworks fees – without altering the essential fee structure – to serve as a future reserve fund.

Let’s take the replacement of the decrepit pipes as an example. Even supposing that people agree to an increase in waterworks rates as revenue to pay for the pipes to be replaced, and we are able to raise rates by ¥200, the reality is that these funds will only be sufficient to cover a few hundred meters of new pipes. This means that we are unable to solve the issues faced today. Even if the “waterworks supporters” have enough information to allow them to make decisions on waterworks, because deliberations are held in the context of current circumstances, the results do not necessarily reflect the issue of safety for future users.

Implementation of Future Design

Despite the fact that the short-sighted choices of current consumers can be potentially disadvantageous to future generations, these future generations are unable to negotiate for themselves given that they do not yet even exist. This is the reason for Future Design (FD). A major attribute of the FD approach is to create groups of people who will stand up for the benefit of future generations. That is, a set of imaginary future persons takes on the role of engaging with the people of the present in negotiations and decision-making. With the welfare of future generations in mind, this method works to overcome conflicts of interest between generations in the decision-making process.

Yahaba has implemented FD initiatives in policy formulation including the “Comprehensive Strategy on Community, People, and Job Creation” and the “Comprehensive Management Plan for Public Facilities”. During the workshop on “Comprehensive Strategy on Community, People, and Job Creation”, deliberations were held between a group of people acting on behalf of the interests of future generations – “imaginary future persons” – and the people of the present. The representatives of the current generation emphasized current issues and unmet needs, attempting to provide solutions

with ideas subject to current limitations. Meanwhile, the imaginary future persons offered long-term solutions and back-casting (“Future Design – Evidence and Insights from Participatory Deliberations” by Keishiro Hara and Tatsuyoshi Saijo, *Journal of Japan Society on Water Environment*, 2017, Vol. 40, Issue 4).

Approximately six months after project implementation, a series of interviews were held with the people who participated in this workshop as imaginary future persons, at which time these individuals noted that there was “no conflict” between themselves as imaginary future persons and their actual position as people of the present. In fact, it was clear that they were looking at social issues from both present and future points of view. In addition, they derived satisfaction from the fact that they were able to consider the issues as imaginary future persons. Therefore, even in their day-to-day lives, it was clear that they were now able to think naturally and effortlessly as people of the future (“Future Design” by Tatsuyoshi Saijo, *TRENDS IN THE SCIENCES*, February 2018).

Following the workshop on “Comprehensive Management Plan for Public Facilities”, the results of the workshop – a picture of Yahaba in 2060 – were used to help devise business strategies. Amidst deliberations on strategy formulation the “waterworks supporters” were given the role of imaginary future persons, deliberating on the structure of waterworks in Yahaba in the year 2060. A dramatic review of the waterworks fee structure was undertaken, with participants discussing how to secure funds for replacing waterpipes in 70-year cycles.

Not limiting the deliberations on waterpipe selection to topics such as cost, type of pipes, etc., people also gave opinions on issues such as pavement repair and road maintenance. Since these kinds of opinions had not been observed in the participants’ past experience or in ordinary workshops, these opinions are clearly derived from the creation of the imaginary future persons and the viewpoint of life in the future.

Conclusion

FD tends to focus on the technical aspect of creating a group of people of the present that would speak for the interests of future generations, who are unable to negotiate for themselves.

It should be noted that individuals who have experienced the role of imaginary future persons derive satisfaction from that role as they view themselves as *both* people of the present and people of the

future. This change in perspective remains with them as they go about their everyday lives following the conclusion of their role representing the people of the future.

Because services such as waterworks are extremely public in nature – due to the fact that they are essential to daily life – the government should not be able to make one-way determinations on criteria and future direction. Instead, policy governing these services should be developed according to a process. Since waterworks and other essential services play a critical part in the lives of residents, it is the residents who should shape them.

As can be observed in the example of the “waterworks supporters” of Yahaba, no matter how much information may have been available to them to consider the issues, because they are engaged in deliberations subject to the limitations of today’s socioeconomic circumstances, their results do not tend to serve future generations.

Meanwhile, deliberations held to devise business strategies – which included having people experience the role of imaginary future persons – served to further not only deliberations on waterworks but on community-building as a whole for the benefit of future generations.

Based on the experiences at Yahaba up to this point, a comprehensive plan to develop initiatives to increase the number of people acting as imaginary future persons – and to perpetuate such a program – must be devised using the FD framework. At the same time a “Future Strategy Department” of some kind must be established to provide recommendations from the perspective of future generations in the formulation of important policy. This is the key to sustainable community development.

JS

Ritsuji Yoshioka is assistant director of the Planning and Public Finance Division of Yahaba in Iwate Prefecture. He works to promote resident participation in town policy formulation as well as FD implementation.



Read and Discover

<https://www.jef.or.jp/jspotlight/latestissue/>



March/April 2019

Future Design – Thinking About Our Legacy to the Next Generation



January/February 2019
Exploring Future Relations in East Asia



November/December 2018
Digital Society — Issues & Challenges



September/October 2018
White Paper on International Economy & Trade 2018



July/August 2018
The Future of Space as Global Commons



May/June 2018
Anxious Individuals & Governments at a Standstill — METI Envisages How to Live a Proactive Life in an Uncharted Era

Visit Japan SPOTLIGHT website!

<https://www.jef.or.jp/journal/>



Japan SPOTLIGHT has been making great efforts to provide our readers with valuable information and knowledge ever since 1982. To fulfill our mission to provide such information to more people eager to learn about the global political economy, our journal became free to access on our website from the January/February 2017 issue in January 2017. We hope many of you will visit our website and enjoy reading our bimonthly English E-Journal *Japan SPOTLIGHT*, published on the 10th of every odd month.



Japan Economic Foundation (JEF)

Editorial Section

5th Floor, GINZA OMI Bldg., 3-7-3 Ginza, Chuo-ku, Tokyo, 104-0061 Japan
Tel: +81-3-6263-2518 Fax: +81-3-6263-2513 email: japanspotlight@jef.or.jp