

平成30年度日米フォーラム（米国）

US-Japan Forum

“Challenges for the Global Economy and
a Better Globalization”

報 告 書

2018年5月25日（金）

（米国 ワシントン DC 開催）

一般財団法人 国際経済交流財団

平成 30 年度日米フォーラム
2018 年 5 月 25 日（金）（於：米国 ワシントン DC）



開会の辞



会場の様子



Brookings 研究所 Homi Kharas 氏



JEF 日下会長



セッション 1 Ostry 氏



セッション 1 小田部氏



セッション 1 Uy 氏



セッション 1 Baily 氏



ランチョンスピーチ Derviş 氏



セッション2 Yusuf 氏



セッション2 福山氏



セッション2 Santos 氏



セッション2 West 氏、
セッション3 Bhattacharya 氏



セッション3 Hultman 氏



セッション3 川口氏



閉会の様子

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1. 開催趣旨

国際経済交流財団は、我が国と諸外国との経済交流を促進するため、各年における経済問題を取り上げ、日米の有識者間でこれらの問題解決等について議論を重ねている。

日米フォーラム事業は、政界、官界、学界、産業界など政策提言に影響力をもつ日米両国を中心とする有識者が一堂に会して、両国の共有する課題などにつき忌憚のない意見交換を行い、我が国の政策立案に資すると共に、日米協力の一層の強化を図りその成果を広く普及させることを目的としている。

平成 30 年度は、2018 年 5 月 25 日（金）に、米国ワシントン DC に於いて、ブルッキングス研究所との共催でフォーラムを実施した。

今回のメインテーマ「Challenges for the Global Economy and a Better Globalization（世界経済とより良いグローバリゼーションへの課題）」のもと、以下の 3 つの課題に関し、解決策、対応策が議論された。

Session 1: 「A Better Globalization（セッション 1：より良いグローバリゼーション）」

Session 2: 「Future of Work（セッション 2：労働の未来）」

Session 3: 「Energy and Climate（セッション 3：エネルギーと気候）」

2. 開催概要

1. 開催日時： 2018 年 5 月 25 日（金） 9:00am – 5:30 pm
2. 開催場所： ワシントン DC（米国）
ブルッキングス研究所内 会議室
Stein Room, The Brookings Institution
1775 Massachusetts Ave., NW, Washington, DC 20036, USA
3. 主催者：
日本側： 一般財団法人国際経済交流財団／Japan Economic Foundation (JEF)
米国側： ブルッキングス研究所／The Brookings Institution
4. テーマ：
“Challenges for the Global Economy and a Better Globalization”
(世界経済とより良いグローバリゼーションへの課題)
Session 1: A Better Globalization
(セッション 1：より良いグローバリゼーション)
Session 2: Future of Work
(セッション 2：労働の未来)
Session 3: Energy and Climate
(セッション 3：エネルギーと気候)
5. 出席者： 日米よりパネリスト 計 19 名

＜日本側＞計 5 名

(五十音順／敬称略)

小田部 陽一	日本電気株式会社 顧問
川口 順子	武蔵野大学客員教授、武蔵野国際総合研究所フェロー
日下 一正	一般財団法人国際経済交流財団 会長
原岡 直幸	一般財団法人国際経済交流財団 専務理事
福山 満由美	株式会社日立製作所研究開発グループ技術戦略室技術統括センター長兼 CIO

<米国側>計 14 名

(アルファベット順／敬称略)

Amar Bhattacharya	Brookings Institution
Darrell West	Brookings Institution
Homi Kharas	Brookings Institution
Indhira Santos	World Bank
Jonathan Ostry	International Monetary Fund
Jun-ichiro Kuroda	Embassy of Japan
Kemal Derviş	Brookings Institution
Marilou Uy	Intergovernmental Group of Twenty-Four on International Monetary Affairs and Development
Martin Baily	Brookings Institution
Minji Jeong	Brookings Institution
Nathan Hultman	University of Maryland
Ryosuke Nakata	JICA USA Office
Shahid Yusuf	George Washington University
Takeshi Soda	Ministry of Economy, Trade & Industry

6. 形式： ラウンドテーブル・ディスカッション

7. 使用言語： 英語

3. 詳細日程

US-Japan Forum: Challenges for the Global Economy and a Better Globalization

Friday, May 25, 9:00 am – 5:30 pm

Stein Room, The Brookings Institution, 1775 Massachusetts Ave, NW, Washington, DC

Context for the Forum:

In recent years, a remarkable backlash against globalization has been observed in many parts of the world. Britain voted to leave the EU. The U.S. administration has an ‘America First’ slogan. Recent elections in France, Germany, and Italy show the rise of public support for anti-globalization policies. At the same time, international cooperation to address global challenges has seen major milestones through the Addis Ababa Action Agenda, UN Sustainable Development Goals, and the Paris Agreement on Climate Change. Moving towards a better globalization must address three challenges. It must promote a revival of global growth and a recoupling of growth with broad-based social advancement. It must foster innovation and the development of technology while tackling any adverse effects on work and combating rising inequality. It must deliver on the energy and climate agenda before the window for limiting global warming to less than 2 degrees closes.

Agenda:

9:00 am- 9:30 am **Coffee and Registration**

9:30 am – 10:00 am **Welcome and Opening Remarks**

- **Homi Kharas**, Interim Vice President & Director, Global Economy and Development, Brookings Institution
- **Kazumasa Kusaka**, Chairman and CEO, Japan Economic Foundation

10:00 am – 11:45 am Session 1: A Better Globalization

Key questions:

- How do participants view the prospects for strong, sustainable, balanced and inclusive growth against a backdrop of decelerating productivity?
- What policy measures are needed to renew domestic social compacts and tackle rising inequality?
- How can we restore trust and confidence in multilateral cooperation and multilateral institutions to deliver on better globalization?

Moderator: (5-7 min.)

- **Homi Kharas**, Interim Vice President & Director, Global Economy and Development, Brookings Institution

Lead speakers: (8-10 min. each)

- **Yoichi Otabe**, Advisor, NEC Corporation, Former Vice Minister for Economic Affairs in Japanese Ministry of Foreign Affairs
- **Jonathan Ostry**, Deputy Director of the Research Department, International Monetary Fund
- **Martin Baily**, Bernard L. Schwartz Chair in Economic Policy Development, Brookings Institution
- **Marilou Uy**, Director, Intergovernmental Group of Twenty-Four on International Monetary Affairs and Development (G-24)

Interactive discussion guided by the moderator (55-65 min.)

12:00 pm – 1:00 pm Luncheon

Speaker: Kemal Derviş, Senior Fellow, Global Economy and Development, Brookings Institution

1:00 pm – 2:30 pm Session 2: Future of Work

Key questions:

- What are the implications of globalization, technological change, and demographic transition for employment, wages, and inequality?
- What are the implications for skills and life-time learning?
- How does the changing nature of work affect developing countries' development pathways?

Moderator: (5-7 min.)

- **Naoyuki Haraoka**, Executive Managing Director, Japan Economic Foundation

Lead speakers: (8-10 min. each)

- **Mayumi Fukuyama**, General Manager, CIO, Technology Management Center, Technology Strategy Office, Hitachi Ltd. Research & Development Group
- **Shahid Yusuf**, Chief Economist of The Growth Dialogue, George Washington University School of Business
- **Darrell West**, Vice President and Director, Governance Studies, Brookings Institution
- **Indhira Santos**, Senior Economist, Social Protection and Labor Global Practice, The World Bank

Interactive discussion guided by the moderator (45-55 min.)

2:30 pm – 2:45 pm Coffee Break

2:45 pm – 4:15 pm Session 3: Energy and Climate

Key questions:

- What are the prospects for and what actions are needed to keep the global climate goal on track?
- How can we accelerate the shift to low-carbon energy systems taking advantage of rapidly developing technologies?
- How can policy support and financing from international institutions help accelerate countries' implementation of NDCs?

Moderator: (5-7 min.)

- **Kazumasa Kusaka**, Chairman and CEO, Japan Economic Foundation

Lead speakers: (8-10 min. each)

- **Nathan Hultman**, Director of the Center for Global Sustainability and Associate Professor, University of Maryland School of Public Policy
- **Yoriko Kawaguchi**, Fellow, Musashino Institute for Global Affairs, Musashino University, Former Minister of Foreign Affairs of Japan
- **Amar Bhattacharya**, Senior Fellow, Global Economy and Development, Brookings Institution

Interactive discussion guided by the moderator (45-55 min.)

4:15 pm – 4:30 pm Closing Remarks

- **Kazumasa Kusaka**, Chairman and CEO, Japan Economic Foundation
- **Amar Bhattacharya**, Senior Fellow, Global Economy and Development, Brookings Institution

4:30 pm – 5:30 pm Cocktail Reception

4. 出席者

計19名（アルファベット順）

Participants

Amar Bhattacharya
Darrell West
Homi Kharas
Indhira Santos
Jonathan Ostry
Jun-ichiro Kuroda
Kazumasa Kusaka
Kemal Derviş
Marilou Uy

Martin Baily
Mayumi Fukuyama
Minji Jeong
Naoyuki Haraoka
Nathan Hultman
Ryosuke Nakata
Shahid Yusuf
Takeshi Soda
Yoichi Otabe
Yoriko Kawaguchi

Affiliations

Brookings Institution
Brookings Institution
Brookings Institution
World Bank
International Monetary Fund
Embassy of Japan
Japan Economic Foundation
Brookings Institution
Intergovernmental Group of Twenty-
Four on International Monetary Affairs
and Development
Brookings Institution
Hitachi Ltd.
Brookings Institution
Japan Economic Foundation
University of Maryland
JICA USA Office
George Washington University
Ministry of Economy, Trade & Industry
NEC Corporation
Musashino University

5. 略歴

Biographies of Panelists

Welcome and Opening Remarks



Homi Kharas

Interim Vice President & Director of Global Economy and Development
Brookings Institution

Homi Kharas is the Interim Vice President and Director of the Global Economy and Development program. In that capacity, he studies policies and trends influencing developing countries, including aid to poor countries, the emergence of the middle class, and global governance and the G-20. He has served as the lead author and executive secretary of the secretariat supporting the High Level Panel, co-chaired by President Sirleaf, President Yudhoyono and Prime Minister Cameron, advising the U.N. Secretary General on the post-2015 development agenda (2012-2013). The report, “A New Global Partnership: Eradicate Poverty and Transform Economies through Sustainable Development” was presented on May 30, 2013. His most recent co-authored/edited books are *The Imperative of Development* (The Wolfensohn Center at Brookings, 2017), *The Last Mile in Ending Extreme Poverty* (Brookings Press, 2015), *Getting to Scale: How to Bring Development Solutions to Millions of Poor People* (Brookings Press, 2013); *After the Spring: Economic Transitions in the Arab World* (Oxford University Press, 2012); and *Catalyzing Development: A New Vision for Aid* (Brookings Press, 2011). He has published articles, book chapters and opinion pieces on global development policy, global trends, the global food crisis, international organizations, the G20, the DAC and private philanthropy.



Kazumasa Kusaka

Chairman and CEO
Japan Economic Foundation

Kazumasa Kusaka has been Chairman and CEO of the Japan Economic Foundation (JEF) since April 1, 2013, and is also a

Professor at University of Tokyo Graduate School of Public Policy. He previously served for 36 years in Japan's Ministry of International Trade and Industry (MITI), rising to become vice-minister for international affairs in the reorganized Ministry of Economy, Trade and Industry (METI) in 2004. During his long career in public service, Kusaka was seconded to the International Energy Agency (IEA)/OECD and was Japan's senior official for Asia-Pacific Economic Cooperation (APEC). He played a central role in Asia's economic integration, promoting FTAs in the region as well as serving as a senior official negotiating the Doha development agenda of the WTO. He was head of Japan's Energy Agency and held director-general positions in technology and environmental policy in addition to trade and investment-related areas within METI. He was also instrumental in finalizing the Kyoto Protocol, and developing Japan's energy and environment policies. Among many other posts Kusaka has held are Special Adviser to the Prime Minister on Global Warming, senior vice president of Mitsubishi Electric, executive adviser to Dentsu Inc., and president of the Japan Cooperation Center for the Middle East.

Session 1. A Better Globalization



Moderator: Homi Kharas

Interim Vice President & Director of Global Economy and Development
Brookings Institution

See biography at page 1.



Yoichi Otabe

Advisor, NEC Corporation
Former G8, G20 Sherpa

Mr. Yoichi Otabe is currently an Advisor at NEC Corporation. Prior to his current position, he served as the Ambassador Extraordinary and Plenipotentiary, Permanent Mission of Japan to the International Organizations in Geneva, during the period between 2011 and 2016. Mr. Yoichi Otabe entered Ministry of Foreign Affairs of Japan in 1974. In his career

he served as the Director-General of Economic Affairs Bureau (G8 Foreign Affairs Sous-Sherpa, 2007-2008), and Deputy Minister for Foreign Affairs (G8 ,G20 Sherpa, 2009-2010).



Jonathan Ostry

Deputy Director of Research Department
International Monetary Fund

Jonathan D. Ostry is Deputy Director of the Research Department at the International Monetary Fund. His recent responsibilities include leading staff teams on: IMF-FSB Early Warning Exercises on global systemic macrofinancial risks; vulnerabilities exercises for advanced and emerging market countries; multilateral exchange rate surveillance, including the work of CGER, the Fund's Consultative Group of Exchange Rates, and EBA, the External Balance Assessment; international financial architecture and reform of the IMF's lending toolkit; capital account management (capital controls and prudential tools to manage capital inflows) and financial globalization issues; fiscal sustainability issues; and the nexus between income inequality and economic growth. Past positions include leading the division that produces the IMF's flagship multilateral surveillance publication, the World Economic Outlook, and leading country teams on Australia, Japan, New Zealand, and Singapore. Mr. Ostry is the author/editor of a number of books on international macro policy issues, including, *Taming the Tide of Capital Flows* (MIT Press, 2017), and numerous articles in scholarly journals. His work has been widely cited in print and electronic media, including the BBC, the Economist, the Financial Times, the Wall Street Journal, the New York Times, the Washington Post, Business Week, and National Public Radio. His work on inequality and unsustainable growth has also been cited in remarks made by President Barack Obama. He earned his B.A. (with distinction) from Queen's University (Canada) at age 18, and went on to earn a B.A. and M.A. from Oxford University (Balliol College), and graduate degrees from the London School of Economics (M.Sc., 1984) and the University Chicago (Ph.D., 1988). He is listed in *Who's Who in Economics* (2003).



Martin Baily

Bernard L. Schwartz Chair in Economic Policy Development,
Senior Fellow

Brookings Institution

Baily re-joined Brookings in September 2007 to develop a program of research on business and the economy. He is studying productivity growth, retirement, and financial regulation. He is a Senior Advisor to the McKinsey Global Institute and to the Albright Stonebridge Group. He is a member of the advisory panels of the Committee on Economic Development, and Macroeconomic Advisers. In August 1999 Dr. Baily was confirmed as Chairman of the Council of Economic Advisers. As Chairman, Dr. Baily served as economic adviser to the President, was a member of the President's Cabinet and directed the staff of this White House agency. He completed his term as Chairman on January 19, 2001. Dr. Baily previously served as one of the three Members of the President's Council of Economic Advisers from October 1994 until August 1996. Baily was a member of the Squam Lake Group of financial economists and a Director of The Phoenix Companies of Hartford CT from 2005-16. He was the co-chair of the Financial Regulatory Reform Initiative of the Bipartisan Policy Center, and an adviser to the Congressional Budget Office from 2006-09. Dr. Baily was a Principal at McKinsey & Company from September 1996 to July 1999. From 2001 to 2007 he was a Senior Fellow at the Peterson Institute where he published books on the European economy and on pension reform. Baily was the co-chair of the Taskforce on Financial Reform convened by the Pew Charitable Trusts. Dr. Baily earned his Ph.D. in economics in 1972 at the Massachusetts Institute of Technology. After teaching at MIT and Yale, he became a Senior Fellow at the Brookings Institution in 1979 and a Professor of Economics at the University of Maryland in 1989. He is the author of many professional articles and books, testifies regularly to House and Senate committees and is often quoted in the press.



Marilou Uy

Director

Intergovernmental Group of Twenty-Four on International
Monetary Affairs and Development

Marilou Uy is Director of the Intergovernmental Group of

Twenty-Four on International Monetary Affairs and Development (G-24). Prior to that, she was the Senior Adviser to the Managing Director at the World Bank. While at the World Bank, she also served as Sector Director for the Africa Financial and Private Sector Development Department from 2007 to 2011 and Director of the Financial Sector Operations and Policy Department in the Financial Sector Vice-Presidency as well as Chair of the Financial Sector Board from 2002 to 2007. Since joining the World Bank in 1985 as part of the Young Professionals Program, she has worked on financial sector and private sector development in Latin America, Middle East, South Asia, and Africa, and globally. She was also part of the Development Economics Group's research team that prepared "The East Asian Miracle" in 1991, in which she focused on financial sector issues, together with Joseph Stiglitz. Ms. Uy pursued her graduate studies in economics and finance at the University of California, Los Angeles.

Luncheon



Speaker: Kemal Derviş

Senior Fellow

Global Economy and Development, Brookings Institution

Kemal Derviş is a Senior Fellow and the Edward M. Bernstein Scholar with the Global Economy and Development program at the Brookings Institution in Washington, D.C. He was formally the Vice President of the Brookings Global Economy and Development program, Executive Head of the UNDP, member of the Turkish Parliament, and Minister for Economic Affairs and the Treasury of the Republic of Turkey, responsible for Turkey's recovery program after the devastating financial crisis of February 2001. Dr. Derviş earned his Bachelor's (First Class Honours) and Master's Degrees (with Distinction) from the London School of Economics, and his Ph.D. from Princeton University. He has published several books and articles in academic journals as well as current affairs publications in English, Turkish, French, and German, on topics ranging from mathematical models of economic growth to macroeconomic policy, social mobility, international trade, European affairs, global governance, and climate change. Recent books include a collection entitled *Reflections on Progress, Essays on the Global Economy* published by the Brookings Press in July 2016; *Inequality in America: Facts, Trends, and International Perspectives* (2012) co-authored with Uri Dadush and others; *Europe's Crisis, Europe's Future* (2014) co-edited with

Jacques Mistral; and G20 at Five: Time for Strategic Leadership (2014) co-edited with Peter Drysdale. Dr. Derviş also has a monthly column published in many languages in newspapers around the world through Project Syndicate.

Session 2. Future of Work

Moderator: Naoyuki Haraoka



Executive Managing Director
Japan Economic Foundation

Born in Tokyo in 1955. After graduating the University of Tokyo in 1978 (Bachelor of Economics), he joined MITI (Ministry of International Trade and Industry) of Japanese government. Having been posted in the industrial policy section and the international trade policy section for a few years, he was enrolled in a two year MPA (Master of Public Administration) programme at Woodrow Wilson School of Princeton University in the US on a Japanese government sponsorship. After having acquired MPA at Princeton, he rejoined MITI in 1984 as an economist. Since then he had been posted as Deputy Director and Director of a number of MITI divisions including Research Division of International Trade Policy Bureau. He was also posted in Paris twice, firstly, Principal Economist of Trade Bureau of OECD (Organization of Economic Cooperation and Development) from 1988 to 92 and secondly Counselor to Japanese Delegation of OECD from 1996 to 99. After coming back to MITI from his second stay in Paris, at the occasion of the government structural reform in 2001 when MITI was remodeled as METI (Ministry of Economy Trade and Industry) he joined the efforts to found METI research institute, Research Institute of Economy Trade and Industry as its Director of Administration. He became Chief Executive Director of JETRO San Francisco in 2003 and stayed in San Francisco until 2006. He was Director-General of METI Training Institute from 2006 until July, 2007 when he left METI permanently and joined JEF as Executive Managing Director.



Mayumi Fukuyama

General Manager, CIO, Technology Management Center,
Technology Strategy Office
Hitachi Ltd. Research & Development Group

Mayumi Fukuyama is currently General Manager and CIO Technology Management Center, Technology Strategy Office, Research & Development Group of Hitachi, Ltd. Fukuyama joined the Mechanical Engineering Research Laboratory at Hitachi, Ltd. in 1987 after completing her B.Sci. at the Kyoto university. She began her research career in mechanical engineering of power plants and worked on the research and development of reliability technology for societal infrastructure. Appointed General Manager of the Mechanical Engineering Center, Hitachi Research Laboratory in 2014, and took her current position in 2015. Fukuyama received her Ph.D. in engineering from the University of Tokyo in 2002. She is a member of the Science Council of Japan and the Engineering Academy of Japan. She is a fellow of the Japan Society of Mechanical Engineering.



Shahid Yusuf

Chief Economist of The Growth Dialogue
George Washington University School of Business

Shahid Yusuf is currently Chief Economist of The Growth Dialogue at the George Washington University, School of Business in Washington DC; a Non-Resident fellow of the Center for Global Development in Washington DC; and Adjunct Professor at the Paul H. Nitze School of Advanced International Studies, Johns Hopkins University. He holds a Ph.D. in Economics from Harvard University, and a BA in Economics from Cambridge University. Prior to joining the Growth Dialogue, Dr. Yusuf was on the staff of the World Bank. During his 35 year tenure at the World Bank, Dr. Yusuf was the team leader for the World Bank-Japan project on East Asia's Future Economy from 2000-2009. He was the Director of the World Development Report 1999/2000, Entering the 21st Century. Prior to that, he was Economic Adviser to the Senior Vice President and Chief Economist (1997-98), Lead Economist for the East Africa Department (1995-97) and Lead Economist for the China and Mongolia Department (1989-1993). Dr. Yusuf has written extensively on development issues, with a special focus on East Asia and has also published widely in various academic journals. He has authored or edited 30 books and monographs on industrial and urban development, innovation systems and tertiary education, many of which

have been translated into a number of different languages. His publications include: *China and the Global Economy*; *Development Economics through the Decades*; *Economic Challenges for Korea* (co-authored with Danny Leipziger and Carl Dahlman); *Tiger Economies under Threat* (co-authored with Kaoru Nabeshima); *Two Dragonheads: Contrasting development paths for Beijing and Shanghai* (co-authored with Kaoru Nabeshima); and *Some Small Countries Do It Better: Rapid Growth and its Causes in Singapore, Finland and Ireland* (co-authored with Kaoru Nabeshima). Dr. Yusuf lives in the Washington DC area and consults with a number of organizations.



Darrell West

Vice President and Director, Governance Studies
Brookings Institution

Darrell M. West is the Vice President of Governance Studies and Director of the Center for Technology Innovation at the Brookings Institution. He holds the Douglas Dillon Chair in Governance Studies. Previously, he was the John Hazen White Professor of Political Science and Public Policy and Director of the Taubman Center for Public Policy at Brown University. His current research focuses on technology policy, artificial intelligence, and data analytics. West is the author of 23 books including *The Future of Work: Robots, AI, and Automation* (Brookings, 2018); *Megachange: Economic Disruption, Political Upheaval, and Social Strife in the 21st Century* (Brookings, 2016), *Billionaires: Reflections on the Upper Crust* (Brookings, 2014), *Digital Schools* (Brookings, 2012), *The Next Wave: Using Digital Technology to Further Social and Political Innovation* (Brookings, 2011), *Brain Gain: Rethinking U.S. Immigration Policy* (Brookings, 2010), *Digital Medicine: Health Care in the Internet Era* (Brookings, 2009), *Digital Government: Technology and Public Sector Performance*, (Princeton University Press, 2005), and *Air Wars: Television Advertising in Election Campaigns* (Congressional Quarterly Press, 2013), among others. He is the winner of the American Political Science Association's Don K. Price award for best book on technology (for *Digital Government*) and the American Political Science Association's Doris Graber award for best book on political communications (for *Cross Talk*). His books have been translated into Chinese, Japanese, and Korean, and he has delivered nearly 150 lectures in a dozen different countries, including China, Japan, Russia, Taiwan, Mexico, Brazil, Germany, Netherlands, Portugal, Turkey, Bahrain, and the United States, and has been quoted in leading newspapers, radio stations, and national television networks around the world.



Indhira Santos

Senior Economist, Social Protection and Labor Global Practice
The World Bank

Indhira Santos is a Senior Economist at the World Bank. Currently, she is part of the World Development Report (“Internet for Development”) team. She is part of the Social Protection and Labor Global Practice. Before the WDR assignment, she worked in the Europe and Central Asia Region. She specializes on labor market issues and skills development for employment. Previously, she worked on similar issues in the South Asia Region. She joined the Bank in 2009 through the Young Professionals Program. Between 2007 and 2009, she was a Research Fellow at Bruegel, a European policy think-tank in Brussels. Previously, she was Researcher at the economic research center of PUCMM University and worked for the Ministry of Finance. She has also worked for the central Bank of Turkey. She holds a PhD in Public Policy from the Kennedy School of Government at Harvard University, with a specialization in economic development and public economics.

Session 3. Energy and Climate



Moderator: Kazumasa Kusaka

Chairman and CEO
Japan Economic Foundation
See biography at page 2.



Nathan Hultman

Associate Professor; Director, Center for Global Sustainability
University of Maryland School of Public Policy

Nathan Hultman is Director of the Center for Global Sustainability and Associate Professor at the University of Maryland School of Public Policy. He is also a nonresident Senior Fellow at the Brookings Institution, and Associate Director of the Joint Global Change Research Institute, a collaboration between the University of Maryland and the Pacific Northwest National Laboratory. From 2014-2016, Hultman worked at the White House on the Obama Administration’s climate and energy policy team. During this

time, he helped develop the US 2025 climate target, worked on U.S. bilateral engagements with China, India, Brazil and others, and participated in the international climate negotiations in Lima and Paris. His research focuses on national climate target-setting and assessment, U.S. emissions mitigation policy, energy technology transitions in emerging economies and international climate policy. He has participated in the UN climate process since the Kyoto meeting, and is a contributing author to the IPCC Fifth Assessment Report and Special Report on Renewable Energy. He is currently co-chair of the America's Pledge 2018 Report. Hultman was formerly a visiting fellow at the University of Oxford, assistant professor at Georgetown University, Fulbright fellow and NASA Earth Systems Science Fellow in climate sciences. He holds an M.S. and Ph.D. in Energy & Resources from the University of California, Berkeley and a B.A. in Physics from Carleton College.



Yoriko Kawaguchi

Fellow, Musashino Institute for Global Affairs
Musashino University

Yoriko Kawaguchi is Visiting Professor at Musashino University, and Fellow at Musashino Institute for Global Affairs. She also is Distinguished Fellow of Tokyo Foundation for Policy Research.

Prior to this, Ms. Kawaguchi was Professor at Meiji University and the Institute for Global Affairs, Meiji University from 2013 to 2018; Member of the House of Councilors (Upper House, elected) for the Liberal Democratic Party from 2005 to 2013; Special Adviser to the Prime Minister of Japan on foreign affairs from 2004 to 2005; Minister for Foreign Affairs from 2002 to 2004 and Minister of the Environment from 2000 to 2002. Ms. Kawaguchi received Master of Philosophy in Economics from Yale University and BA in International Relations from Tokyo University. Ms. Kawaguchi was awarded the Order of the Grand Cordon of the Rising Sun in May 2017, Star of Jerusalem by Palestinian National Authority in October 2010 and Wilbur Cross Medal by Yale University in October 2008. Ms. Kawaguchi co-edited and co-authored a book titled, *Future View of the Asia-Pacific – Networked Hegemony* (Tokyo: Chuokeizai-sha, Inc.) published in Japanese in August 2017. It is on the question of whether Asia-Pacific can thrive peacefully in coming years with a focus on the "actors" to lead the regional order and the "structure."



Amar Bhattacharya

Senior Fellow, Global Economy and Development
Brookings Institution

Amar Bhattacharya is Senior Fellow at the Global Economy and Development Program at Brookings Institution. His focus areas are the global economy, development finance, global governance, and the links between climate and development including on the role of sustainable infrastructure. His latest major publication is a report on Delivering on Sustainable Infrastructure for Better Development and Better Climate. From April 2007 until September 2014 he was Director of the Group of 24, an intergovernmental group of developing country Finance Ministers and Central Bank Governors. Prior to taking up his position with the G24, Mr. Bhattacharya had a long-standing career in the World Bank. His last position was as Senior Advisor and Head of the International Policy and Partnership Group. In this capacity, he was the focal point for the Bank's engagement with key international groupings and institutions such as the G7/G8, G20, IMF, OECD and the Commonwealth Secretariat. He completed his undergraduate studies at the University of Delhi and Brandeis University and his graduate education at Princeton University.

Closing Remarks



Kazumasa Kusaka

Chairman and CEO
Japan Economic Foundation
See biography at page 2.



Amar Bhattacharya

Senior Fellow, Global Economy and Development
Brookings Institution
See biography at page 9.

6. 議事要旨

(日本語)

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サマリー (仮訳)

日米フォーラム： 世界経済とより良いグローバリゼーションへの課題

国際経済交流財団（JEF）とブルッキングス研究所
グローバル経済・開発プログラムの共催による合同会議

2018年5月25日（金）

米国ワシントンDC、ブルッキングス研究所シュタインルーム
(Stein Room, The Brookings Institution, 1775 Massachusetts Ave, NW,
Washington, DC)

議事要旨

フォーラムの背景：

近年、世界中でグローバル化への反動が顕著になっている。英国はEU離脱を議決した。ホワイトハウスは「アメリカ・ファースト」スローガンを掲げている。最近のフランス、ドイツ、イタリアでの選挙では、反グローバル化政策に対する市民の支持の高まりが示された。同時に、世界的な課題に対応する国際協力では、「アディスアベバ行動目標」、「国連の持続可能な開発目標」、「気候変動に関するパリ協定」などを通じて画期的な進展がみられた。より良いグローバリゼーションを目指すには以下の

3つの課題に取り組む必要がある。(1) 地球規模の成長回復を推進し、その成長と社会の広範な発展との再連動を促さねばならない。(2) イノベーションとテクノロジーの発展を促進し、労働に及ぼす悪影響に対処し、格差の拡大を抑制しなければならない。(3) 世界の気温上昇を(産業革命以前と比較して) 2℃未満に抑える削減目標期間の終了前に、エネルギーと気候問題への対策を実行しなければならない。

開会挨拶

スピーカー：

- ・ ホミ・カラス氏：ブルッキングス研究所 グローバル経済・開発プログラム 暫定バイスプレジデント兼ダイレクター
- ・ 日下一正氏：国際経済交流財団 会長兼CEO

開会挨拶要旨：

世界は、急激な変化と多くの喫緊課題に直面している。今後15年間でインフラストックチャーのストックは2倍以上になると予測されている。都市人口は急速に増加しており、アフリカでは雇用成長は人口急増に追いつけていない。生産性の伸びは非常に低い。CO₂排出と経済成長の非連動化も課題である。エネルギーと気候変動への長期的対応が必要である。物価上昇率と実質金利が低い中、技術進展があると好機となるが、その機会は急速に失われつつある。

グローバル化は生産性を高める方法と考えられていたが、グローバル化に伴う問題も生じている。成長と社会の安定は非連動化してきている。国民所得に占める資本比率は増大し、賃金格差も広がっている。工場の地元労働者数はほんのわずかに過ぎない。ケマル・デルビシュ氏はその著書『より良いグローバリゼーション (A Better Globalization)』で、グローバル化の政治は経済力とともに考察することが重要であると結論づけている (Derviş, 2005)。我々全員が、より良いグローバリゼーションを追求すべきであるが、問題は「誰のためにより良いのか」ということである。

変化は迅速でなければならないが、同時にそれは憂慮を引き起こすリスクがある。現在は、早すぎる変化による反動を懸念して、政策決定者が方針決定を遅らせようと努めている。ポピュリズムの台頭と反グローバル化の広まりにより、この3年間は世界中で大きな変化が起きてきた。我々は保護主義への国際的な懸念と新たなガバナンス

体制に直面しており、トランプ現象とは何か、果たして1人のリーダーが、良くも悪くも違いをもたらすことができるのか、という問いに頭を悩ましている。

潜在的な解決策の多くは、さらに広く世界的な協力を必要とする。経済面だけでなく政治面、社会面からも、国内外のさまざまな関与者を包括的に集結させなければならない。1国の政府だけでは、気候目標を達成できないが、1人の元首だけでは進展を止められない。G7の歴史を振り返ると、民主制度において政治力に欠けたリーダーは、国内的に必要なだが、怒りに満ちた国内有権者にとっては不評な方策の承認を得るために、国際的な合意を必要とした。我々には意識を同じくする関与者と、関与者を賢明に活用できるシステムが必要である。

しかし世界的な協力は困難になってきている。なぜなら現代は、新興経済国を含む多くの国の間で、経済力に大きなばらつきがあるためである。経済力の集中は再びG2やG3の形成に向かうが、その新たな構成国である米国、中国、インドは、同じ意識を持つグループとしてまとまることはない。したがって、この3カ国は解決策を真剣に考えない可能性があり、経済的観点からではなく、相対的な政治力の観点で解決策を考えようとはかねない。

セッション1：より良いグローバリゼーション

主要な論点：

- ・ 生産性の減速という状況の中で、強固、持続可能で、均衡であり、かつ包摂的な成長をフォーラム参加者はどのように予想しているか。
- ・ 国内の社会契約を更新し、拡大する格差に取り組むために必要な政策措置とは何か。
- ・ より良いグローバリゼーションを実践するために、多国間協力や多国間制度の信頼と信任を回復するにはどのようにすれば良いか。

モデレーター：

ホミ・カラス氏：ブルッキングス研究所 グローバル経済・開発プログラム 暫定バイスプレジデント兼ダイレクター

主要スピーカー：

- 小田部陽一氏：NEC顧問 外務省元外務審議官（経済担当）
- ジョナサン・オストリー氏：国際通貨基金 研究部 副局長
- マーティン・ベイリー氏：ブルッキングス研究所 経済政策開発部門 バーナード・L・シュワルツ・チェアー
- マリルー・ウイ氏：国際通貨及び開発案件に関する24カ国政府間グループ（G-24）局長

議事要旨：

世界経済の見通しは大きく変化している。我々は今後10～15年間で、現在のすべてのインフラストックを超える、新たなインフラを整備することになる。目下、都市化のピーク期を迎えつつあり、歴史上最大の人口が都市に移動している。主としてアフリカ大陸でみられる、最後で大規模かつ急激な人口増加がまさにそうである。このような状況を背景に、今、物事を正しく行うよう我々の背中を押す好機がある。しかしこのチャンスも、今後15年ほどの期間で閉ざされてしまうであろう。

課題の緊急性を考えれば、グローバル化のプロセスのスピードを落とすのではなく、そのメリットをうまく活用しつつリスクを抑える手法で、グローバル化を進めることが正解である。ここから、世界を変化させるさまざまな影響力についての実質的な論点——生産性の上昇、格差の拡大、開発途上国が果たす役割の拡大、債務持続可能性の課題など——が引き出される。

生産性の上昇は経済成長の促進に重要であるため、その停滞が懸念となってきた。生産性上昇の停滞は世界金融危機（リーマンショック）と関連付けられてきたが、それ以前に発生していたのではないかという議論もある。米国での生産性上昇の停滞は製造部門、特に製造業のハイテク部門に起因している。製造業が経済に及ぼす影響はもはや大きくはないが、生産性上昇への貢献はいまだに非常に大きい。1990年代、製造業のハイテク部門は生産性上昇への圧倒的な貢献をみせたが、その後失速し、生産性上昇全般に水を差した。サービス産業でのスピーディーな産業構造転換は、製造業に比べてはるかに困難である。テクノロジーや製造手法の導入は、サービス業に比べ、製造業の方が容易である。停滞のもう1つの理由は、1990年代の卸売・小売部門での急速な生産性の上昇が終焉したことである。アマゾンなどのオンライン小売業者によって生産性が大きく上昇することはなかった。これらオンライン小売業者の破壊的な影響力が、生産性へのプラスの寄与を圧倒してしまったからである。総需要の低迷も、生産性上昇の停滞要因となった（Remes et al., 2018）。

このような背景のもと、成長に資するマクロ経済政策を米国が採用することはなかった。「完全雇用」経済時には大幅な財政拡大は不要であり、財政拡大すると結局は累積債務危機に陥ってしまうことがある。増税が経済成長を阻害しないことは歴史が示している。労働力は変化しており、将来の労働は現在とは異なるため、労働力政策が我々には必要である。また、未熟練労働者の能力向上のための政策も必要である。これらの政策は、包括的成長と迅速な成長の両方の実現のために不可欠である。

テクノロジーは、生産性の上昇に対し、重要だが不安定な影響を及ぼすと予想されている。テクノロジーに関連した生産性上昇の予測には対照的な見解がある。1つは、簡単に手に届く成果についてはすでに我々は手に入れているので、それ以外の新しいアイデアを生み出すのは困難という見方である（Bloom et al., 2017）。これまでの数年間、生産性上昇が停滞してきたことを考えれば、この議論には大いなる説得力がある。もう1つの見解はもっと楽観的で、テクノロジーは進歩し続け、社会を変革するというものである（Mokyr, 2014）。我々は黄金期——第二次世界大戦後の時期——に戻ることはできないかもしれない。しかし、それは生産性の加速的上昇が今後期待できないという意味ではない。デジタル技術の影響力は経済全体に徐々に広がっていくので、今後、生産性はスピーディーに上昇すると見込まれるのである。テクノロジーは混乱を引き起こすが、結果として生産性上昇という見返りを得る可能性がある。

他の重要な論点として、格差に対するグローバリゼーションとテクノロジーの影響がある。貿易とテクノロジーは格差の促進要因として多くの注目を集めてきたが、それほど注目されてこなかった金融グローバル化も、国内外で増大する不平等の促進要因として重要な役回りを果たしてきた。金融グローバル化の全体的な影響と分配の影響の両方を経済的に分析すると、金融グローバル化によるパイ拡大効果は限られているが、分配の影響は実に顕著であることが分かる（Furceri et al., 2018）。生産性のみを重要視して、包括的な分配は自然についてくると考えることは、非常に危険な賭けである。

金融グローバル化は、グローバル化の利益とコストについての議論の一部に含めるべきである。我々が推奨するすべての政策の全体的な影響と分配の影響を同時に考察する必要がある。生産性を拡大させ資本コストを削減できる政策を我々は検討しなければならない。職業訓練や求職支援といった、いわゆる「トランポリン」政策などの、グローバル化に対応するさまざまな補完的政策を検討する必要がある。

開発途上国は、先進諸国以上に、世界的な変化によるさまざまな影響に直面している。多くの開発途上国にとっての重要な問題は、テクノロジーへの実際のアクセス方法と、生産性上昇のためにテクノロジーを活用する最良の方法である。多くの国では、格差

の悪化、雇用の創出の不足、若年層の失業率の増大が起こっている。格差の問題は、雇用創出策や、技術変革の悪影響を被っている人々の保護策と関係している。国内政策も重要であろうが、多国間社会の果たす役割——技術のさらなる普及を支援し、技術変革によってさまざまな機会が与えられる状況を創出できるよう各国を支援すること——も論点となる。

開発の資金調達については、開発途上国での国内資源動員が極めて重要である。国内税制改革の取り組みに加え、効果的な国際租税協調も必要である。現在、国際租税協調の進展はあるものの、開発途上国が世界全体の税収の正当な分け前を回収できるよう規則を制定し、制度を確立するにあたり、開発途上国の言い分や懸念に耳を傾けるさらなる努力が必要である。多国間開発銀行は、低所得国においてだけでなく、あらゆる新興市場と開発途上国のための資金動員に触媒的な役割を果たすべきである。

債務持続可能性は、開発のための資金調達における重要な課題である。調達資金ニーズが甚大であることを考慮すると、開発途上国は必然的に借入に依存することになる。債務を適切かつ効果的に利用すれば、すぐに元がとれるはずであるが、問題は、それが果たして相応する収益を生み出すプロジェクトに投資されているのかがほとんど分からないことである。国際社会は、以下をより効率的に査定する必要がある。すなわち（1）債務の全容、（2）債務持続可能性を達成できる手段、（3）公的部門と債権者社会が、より多く責任を果たし、各国の債務構造のさらなる回復力を上げるメカニズムを整備し、債権者が開発途上国へ貸付するにあたり調整力と責任を高めるためにさらに何ができるか、である。

世界的な変化の潮流や影響力は、状況や環境によって左右される。フロンティア企業は、それ以外の企業とは異なる問題に直面している。製造業はサービス業とは違う課題を抱えている。開発途上国は先進諸国とは別の状況に置かれている。このようなさまざまな相違を考慮すると、多国間協力は包括的あるいは抽象的に議論できるようなものではない。我々は、こうした制度のさまざまな場面にある相違を認識しつつ、世界規模の協力を推進する政策を選択する必要がある。

ランチョンスピーチ

スピーカー：

ケマル・デルビシュ氏：ブルッキングス研究所 グローバル経済・開発プログラム シニアフェロー

スピーチ要旨：

現在、我々は非常に困難であり、かつ新しい局面に立っている。現代世界、そしてグローバル化を難しいものになっている要因は5つある。

1つ目は、世界経済に占める国内経済の重要性という観点での根本的な構造変革が進行中だということである。グローバル化は、1990年代、ソビエト連邦とその衛星国が市場志向的に世界に門戸を開いたときに始まり、米国は多くの点で絶大な力を持った。それは開発途上国が先進経済に収斂する過程が、実際に始まった時期でもあった。1990年代初頭と比較して現在の世界を考察すると、我々はさまざまな面でまさに多極性の渦中にある。

中国は経済大国として米国と張り合っており、中国がより速く経済成長し続けるという見通しが立てられている。中国は、同国内に重大な危機が起きない限り、10～20年後には優位に立つであろう。ロシアは依然として軍事大国である。その軍事力と軍事行動を考慮すれば、ロシアは明らかに大国の1つである。EUは依然として米国より大きな経済力を有している。EUは加盟国が一体となって行動ができるときもあれば、そうでないときもある。米国は第4極であるが、それはより多極化が進んだ世界においての話である。グローバル・ガバナンスをみた場合、国民国家という観点では、基本構造は従来とはかなり異なっている。我々がIMF、世界銀行、G20、G7、WTOについて議論する際には、その背景となる世界がより多極化していることを忘れてはならない。

2つ目は、貿易と規制の観点では、容易な貿易自由化の大部分は完了している、ということである。関税率はあらゆるところで大幅に削減されている。貿易交渉の論題全体により深く関連しているのは、規制や国境内措置に関する問題である。これが従来の貿易交渉との根本的な相違である。現在の貿易交渉の論題は、国民国家が内政問題だと信じている問題に関連するからである。次の手順は伝統的な貿易政策ではなく規制に関連したもので、これまでよりずっと困難なものになってくる。問題の1つは、世界経済においては規制をどの程度統一する必要があるかということである。プライバシー、所得分配、国家の役割に関しては、各国それぞれの合理的な理由により優先順位が違っている。必要となるのは、このような優先順位を考慮することである。しかし世界経済全体を、個別に規制される複数のサブエコノミーに分裂させることまではできない。優先順位の尊重に努めることと、世界市場があまりに多くの細分化を被らないようにすることの間の適切なバランスを見出すべきである。

3つ目は、重要な活動の各種費用曲線に根本的な変化があったことである。大手テクノロジー企業の多くは、その各種費用曲線や固定費用は非常に高い一方で、限界費用

は非常に低いため、自然と独占企業になる傾向がある。これらの費用構造を規制することは、限界費用がゼロに近くない従来型の費用曲線を有する企業を規制することよりはるかに困難で、簡単な答えはない。この論点は、貿易と規制の論点と相互に結びついている。例えば、この種の各種費用曲線についてどのような競争政策を強いればいいのか、参入を円滑にしようと努力をするべきなのか、固定費が非常に高い場合はどうするのか、などである。

4つ目は、消費者余剰がこれまでよりずっと大きい、という点である。国内総生産に対する経済厚生を考察するにあたっては、消費者余剰を考える必要がある。今日の消費者余剰は多くの新興部門で非常に大きくなっている。多くの部門が以前より分化しており、それぞれの状況に合わせたアプローチを必要としている。消費者余剰が大きな役割を果たしている市場をどのように規制するか、その方法は容易にはみつからない。

5つ目は、経済がより開放され、その国際的な競争力を高めたいと願うほど、国内の社会連帯をより多く必要とする、という点である（Rodrik, 1998）。市場開放と国際協力のために全力を尽くしたエマニュエル・マクロン仏大統領は、その市場開放政策パッケージを社会連帯政策パッケージとも結びつけることが必要となるだろう。最低所得保障という構想は、国民が団結する制度の確立を意味しており、個人の保護を個人の高い可動性（転職や転居）と組み合わせている点で興味深いアプローチである。

これらの変化は、我々がこれから向かう世界は今と違ってくることを、国内レベル・国際レベルの両方で政策を練り上げることが難しくなることを示している。波及効果がなければ、国際的に規制する必要はない。しかし、波及効果は非常に重要であり、そのウェイトはさらに大きくなってきている。新しいテクノロジーには、波及効果と相互作用という視点が必要となる。国の優先事項を尊重し、世界中で運用可能な、データ管理とデータプライバシーへの対応法をみつけなければならない。波及効果を考慮すると、国際協力は今後極めて重要となる。

今後10年間は、世界が新しい制度を見出そうと試みる、あるいは既存の制度を新しい課題に適合させようとする時期となろう。この駆け引きでも日米関係は重要である。多くの場所でネオナショナリズムの台頭がみられるため、私は今後の数年間をあまり楽観視していない。地元有権者の前で重要な国際問題を持ち出し、それによって自分の得票数を増やそうと期待することは非常に難しい。重大で悲惨な出来事が起こらなければ、人々はより強固な世界協力の必要性には目覚めない、ということにならないよう望んでいる。最も魅力に溢れるけん引力は、費用曲線と消費者余剰の新たな特性の産出であり、このような特性が国内外の規制にどのような影響を及ぼすのであろうか。

セッション2：労働の未来

主要な論点：

- グローバリゼーション、技術革新、そして、雇用、賃金、格差の面での人口動態の推移とは、どのような意味を持つのか。
- スキルと生涯学習とは、どのような意味を持つのか。
- 労働の性質が変わると開発途上国の発展への道筋にどのような影響があるのか。

モデレーター：

原岡直幸氏：国際経済交流財団 専務理事

主要スピーカー：

- 福山満由美氏：株式会社日立製作所 研究開発グループ 技術戦略室 技術統括センター長 兼 CIO
- シャヒッド・ユスフ氏：ジョージワシントン大学 ビジネススクール The Growth Dialogue チーフエコノミスト
- ダレル・ウェスト氏：ブルッキングス研究所 ガバナンス研究担当ディレクター 兼 副所長
- インディラ・サントス氏：世界銀行 社会的保護・世界労働慣行担当シニアエコノミスト

議事要旨：

雇用、賃金、格差への重要な意味合いを持つ2つの大きな潮流がある。1つ目は、技術革新である。ロボット、人工知能、アルゴリズム、オートメーションは、多くの部門で労働を変化させている。2つ目はビジネスモデルの転換である。非正規雇用者への依存、リーンマネジメントスタイルの導入、組織のフラット化に基づく管理手法が見られるようになった。

経済・政治面で正しく刷新できれば、我々は2050年までには素晴らしい状態に着地していることであろう。歴史は、それが可能であると示している。米国も、農業経済から工業経済への移行時に、同様の「改革」を経験している。一連の経済・政治改革を続けた結果、数十年に及ぶ混沌とした変化を経て、米国は最終的により良い状態に至

った。経済改革には、社会保障制度、失業保険、教育制度の拡大などがあり、政治改革には、選挙民層の拡大、憲法修正による所得税の導入などがあった。

米国が今日の課題に対処するためには、個人が責任を負う傾向から社会が責任を負う形に移行しなければならず、デジタル経済への移行の中で市民が置いてきぼりにならないよう留意しなければならない。我々には労働者の再教育や生涯学習などいくつかの政策手段がある。より急進的な手段は、米国の富裕層の上位1%に、連帯税という財産税を1%課すというものである（West, 2018）。現行の政治制度にはこの税を実施するために必要なものは備わっていないが、一連の政策改革によって変えられる可能性がある。

世界中で産業・社会インフラのデジタル化が加速しており、デジタルトランスフォーメーションは多くの国の産業経済の特徴となっている。日本政府は、労働力不足や社会保障費の上昇などの社会問題を解決しつつ、人間を中心に考える新しい社会「ソサエティ5.0 (Society 5.0)」という概念を提唱した。昨年、日本の内閣は「ソサエティ5.0」達成のための改革を採択した。「ソサエティ5.0」の5本柱は、①健康・医療・介護サービス、②移動、③ものづくり、④インフラと都市開発、そして⑤金融である。この構想を背景に、日立グループはデータに基づき労働者の幸福度を向上させるデジタルシステムを開発した。同システムの試験では、AIを活用したアドバイスを参加者に与えると、職場がより活性化することが確認された。これはデジタル技術のプラス面を示している。

技術に対する日本の楽観的な展望とは異なり、その他の国、特に開発途上国の多くは、新技術がもたらす機会を最大限に活用できると考えていない。「大いなる収斂」が急速に起きるとは思えない（Baldwin, 2016）。ボールドウィン氏は、新しいグローバリゼーションは、国境を越えてアイデアを移動させるコストを大幅に削減してきた情報技術によってけん引されると示唆している。しかしながらいくつかの要因により、それが実際に起こる可能性に我々は疑問を感じている。1つ目の要因は、国際取引、特に商品取引の伸びが停滞しており、その大幅な加速は期待できないということである。2つ目は、新しい貿易障壁が発生し、国際取引活性化の新たな歯止めとなると見込まれることである。3つ目は、生産活動の局地化が進展する可能性がますます高まっていることである。生産の多くが少数の国に集中するであろう。この予測に伴うのが製品のカスタマイズ需要の高まりである。この点ではオートメーションが後押しするであろう。最後に、先進国が製造業の国内回帰と保護を望んでいる点が挙げられる。

新技術のメリットは開発途上国に行き渡ることはない。近年のエチオピア、カザフスタン、パキスタン、南アフリカのGDPに占める製造業の割合は、横ばいあるいは下降している。この現状を変えるためにこれらの国はどうすればいいのか。製造のニッチ

を見出すことが1つのアプローチではあるが、世界が急速に変化する中、実現は困難である。デジタルテクノロジーを農業に利用すれば成長の機会が生まれる可能性があるものの、これは多くの人を失業させることになる。デジタルサービスの開発も可能性はあるが、それにはある種のスキルを大幅に高度化させる必要がある。このような状況で、より大多数に新技術を浸透させるためには、遠隔教育を活用した技能向上にさらに真剣に取り組む必要がある。しかし、質の高い教育係が少ないことを考えれば、短期間で大きな違いを生み出せるのかどうかは疑わしい。別の分野はR&D(研究開発)である。大半の開発途上国はR&Dへの投資額が低い。インフラ格差の解消は開発途上国にとっては建設的な要素となろうが、利用可能な資源を考えると、それほど急速にできそうにもない。また、東アフリカなどで利用できる電気通信やデジタルテクノロジーを通じて可能となってきた、金融テクノロジーや金融サービスへのアクセスの効果が生産性向上や成長を後押しするかどうかは、いまだ不明確である。

テクノロジーにまつわる懸念の話になると、先進国でのケースに焦点を当てがちだが、開発途上国における問題は、テクノロジーがほとんどないということである。過去に比べれば、テクノロジーが伝播していくスピードは速くなったものの、利用率は非常に低いうえ、このようなテクノロジーが生産的用途に活用される機会はさらに低い。たとえば、開発途上国でデータ活用テクノロジーを有する企業は約30%に過ぎない。先進国では分極化が問題になっているが、開発途上国では話はもっと複雑である。多くの開発途上国では、機械の導入後も依然として単純労働が雇用全体に占める割合が依然として増加している。問題は、開発途上国で雇用全体に占める単純労働の需要が、先進国での過去の需要よりも低くなる状況下で雇用全体がピークに達するか否かである。

他の問題は、技能取得のサポートについてである。たとえば、アフリカの多くの国では識字率が非常に低い。政策決定者は現在の労働者への投資と未来世代への投資の狭間で難しい選択に迫られている。その答えは国によって異なるだろう。いくつかの開発途上国では、現在、労働者は識字率が非常に低いか、あるいは非常に若い年齢から働き始めている。格差の懸念はもう1つの問題である。近年、格差は増大していないが、将来は増大するかもしれないと人々は憂慮している。近日発行予定の2019年版世界開発報告は、この問題に対応するために新しい国内社会契約をどのように利用できるかについて提言している。

労働市場の変化に対処するための政策決定にはいくらかのすき間がある。あるメタ分析によれば、雇用改善や雇用の質向上という面で有効な労働市場プログラムは、全体の約3分の1に過ぎない。開発途上国と先進国では、社会保障と支援へのアプローチを違う形で進めなければならない。国によっては、仕事の80~90%がインフォーマル部門である。理論上優れていると思われるシステムも、そのような国では国民の保護と

いう点で有効とはいえないであろう。したがって、変化する世界で技能を開発し、雇用を守ることができる政策をどのように策定するかについて、試行と議論を深めねばならない。

セッション3：エネルギーと気候

主要な論点：

- 世界的な気候変動対策の目標達成への見通しはどうか、また、目標に向かって進むために必要な行動とは何か。
- 急速に発展する技術を活用し、低炭素エネルギーシステムへの移行を促進するための方策とは何か。
- 国際的な機関からの政策支援や資金供給は、如何にして各国によるNDC（Nationally Determined Contribution：自国が決定する貢献）の実施を加速させられるか。

モデレーター：

日下一正氏：国際経済交流財団 会長兼CEO

主要スピーカー：

- ネイサン・ハルトマン氏：グローバル・サステナビリティ・センター ディレクター 兼 メリーランド大学 公共政策大学院 准教授
- 川口順子氏：武蔵野大学 国際総合研究所顧問（フェロー） 元外務大臣
- アマール・バッタチャリヤ氏：ブルッキングス研究所 グローバル経済・開発プログラム シニアフェロー

議事要旨：

パリ協定は状況を一変させる切り札だった。同協定は、2030年開発アジェンダに組みこまれた持続可能な開発目標と、2015年7月に採択された開発資金に関する「アディアスアベバ行動目標」へのより広範囲な関与を足掛かりに、気候変動の意味するものを「行動に要する費用」から「投資と成長」へと変えた。パリ協定の目標は、世界の平均気

温上昇を2℃未満に抑え、今世紀後半中にネット・ゼロ・エミッションを達成するというものである。現在、行動は起こされているものの、同協定の目標気温達成の要件との間にはまだ大きな隔たりがある。パリ協定で出された現行プレッジに基づく2030年までの総排出量は年間55～60 GtCO₂であり、これは通常の事業運営時に見積もられる年間60～68 GtCO₂より優れている。しかし、実際にパリ協定の目標気温を達成するには、2030年までの総排出量を年間約40 GtCO₂とする必要がある。

昨年の米国のパリ協定離脱表明は、大きな難問を提示した。正式にはまだ離脱していないが、この表明は、CO₂排出削減を図るような新政策は米国内で施行しないというトランプ政権の意向を意味している。かつて米国はパリ協定交渉のリーダーの一翼を担い、開発途上国への資金協力の実施に重要な役割を果たしていただけに、今回の米国の翻意の影響は図り知れない。

パリ協定のもと、そのコミットメントを具体化するにあたり、米国の前政権は、温室効果ガス排出規制についてはすでに可決済みではあるが、さまざまに解釈され、施行された法律を実行するために、数々の行政措置を大いに活用してきた。たとえば、「クリーンパワー・プラン」は、1970年以降改正を重ねてきた大気浄化法（Clean Air Act）という既存法を法的根拠とする規制措置である。トランプ大統領は、「クリーンパワー・プラン」は行政措置であり、執行機関が公表したものであるから、自分はその規制措置を施行しない、後退させる、あるいは撤回する権限があると語った。「クリーンパワー・プラン」は現在保留されており、今後撤廃される見込みである。また、米国は別の分野の政策も覆した。それは輸送分野におけるCO₂排出に関わる規則である。米国では車両燃費を統制する一連の規則がある。米環境保護庁は、米前政権により制定された規則を緩和する意図を表明した。新政権は、規制措置の撤廃または不施行という意図をもって、オバマ政権のさまざまな規制措置のすべてを体系的に見直している。しかしながら、米国制度の厄介な問題の1つは、規制措置の見直しのあらゆるステップに、非常に複雑な法的手続きがあるということである。したがって、そのような規制措置を単純に撤回することはできない。しかるべき手続きを踏むには時間がかかるため、遅々として進まない場合もありうる。

米国内で連邦政府がリーダーシップを発揮しないことは損失であるが、非連邦政府レベルでは、気候変動に関する取り組みは非常に活発になっている。昨年、トランプ大統領がパリ協定離脱を表明すると、そのあと72時間の間に「我々はパリ協定に残る（We Are Still In）」と称する連合組織が始動した。現在「We Are Still In」には、全米2,700の地方自治体、州政府、企業が参加している。同組織は1億5,900万人の米国人、米国GDPの50%超を代表している。これは世界のGDP第4位に匹敵する。この組織に参加する関係者は潜在的に大きな実力を持ち、州レベルで重要な政策への影響力を有している。同組織は、撤回されていない連邦の行動とすべての非連邦による行動を合

わせて得られる成果の分析結果についての報告書を、今年9月に公表することになっている。これらの約束によって達成されるCO₂削減量という観点からだけでなく、9月にカリフォルニア州で開催される世界気候行動サミットと来年開催される国連事務総長による国連気候サミットにも関連させて発表すると見込まれる、より練り上げた、あるいは意欲的な約束によるCO₂削減量の観点からも、この分析は興味深いものとなるだろう。現在、我々が目撃しているのは、これらのサブナショナルな（主権国家の下位レベルの）関係者が、米国経済のCO₂削減に対するより長期に渡る持続的な取り組みとなる可能性のあるものの基礎を築くため、非常に大きな責任を担っている、ということである。

米国は気候変動の安全保障的な面により多くの注意を払うべきである。中国はエネルギー政策とエネルギーの安全保障に重要な役割を果たすことになるだろう。中国は現在、電気自動車と再生可能エネルギー設備の最大生産国である。エネルギー政策における米国の強みは、天然ガスの蓄積と、石油輸送に重要なシーレーン防衛力である。今後、中国が再生可能エネルギーに重要な役割を果たすようになると、この権力基盤の転換が起こるだろう。

エネルギーはパリ協定の目標達成に重要な役割を果たす。エネルギーはCO₂全排出量の約70%を占めるためである。エネルギー転換の加速にあたり、我々は2つの大きな課題に直面している。1つ目は、エネルギー・アクセスを向上させる必要性である。合理的なエネルギー・アクセスを得るために必要な1次エネルギーはおよそ100 GJ／人／年とされている。しかし世界中の人間がそれぞれ100 GJを消費すれば、カーボンフットプリント（CO₂排出量）に対応できなくなる恐れがある（Energy Transitions Commission [エネルギー転換委員会] , 2017）。第2の課題は、脱炭素化である。石炭が段階的に完全廃止されることに疑いの余地がないが、それは市場原理によるものである。石油消費量は減少していくとしても、その速度は石炭より緩慢である。天然ガスは代替資源として成長し続けると見込まれ、これは米国にとって利益となる。

政策は、エネルギーの根本的な転換に大きな役割を果たす。カーボンプライシング（炭素価格制度）は非常に重要である。炭素価格ハイレベル委員会は、炭素価格の水準は、短期では40～80ドル／tCO₂、中期では50～100ドル／tCO₂とすべきであると結論している（Carbon Pricing Leadership Coalition [カーボンプライシングリーダーシップ連合] , 2017）。カーボンプライシングは、燃料効率基準、貧困層への給付金、より良いテクノロジー採用政策などの規則で補完しなければならない。その他の政策として、化石燃料補助金がある。化石燃料補助金を全額廃止すれば、排出量は約37 GtCO₂低減できるであろう（Gerasimchuk et al., 2017）。

テクノロジーはエネルギー転換をけん引するもう1つの要素である。再生可能エネルギーのテクノロジー開発は予想以上に堅調に進み、その結果、経費削減も急速に進んだ。2017年6月以来、米国には容量9 GWの再生可能エネルギー設備が設置されたが、その内の2.1 GW分は1月・2月中だけで完了した。石炭は市場原理のあおりを受けている。米国の採炭従事者数はおよそ5万人で、石炭関連事業の雇用総数は、石炭火力発電所や他の派生事業を含めてもおよそ15万人に過ぎない。太陽エネルギー関連や風力エネルギー関連の雇用者数をみると、それぞれ約15万人で、米国では推定で約300万人が、設備の省エネなどクリーンエネルギー関連の仕事に従事している。石炭は過去10年、大きな需要減退を目の当たりにし、この状況は過去数年で加速している。ブルームバーグ・ニュー・エナジー・ファイナンスの推定では、過去6年間ですべての石炭火力発電所の半分が赤字で稼働している（Ryan, 2018）。GEは、ガスタービン・コンバインドサイクル発電プラントの需要は1年前の予測に比べ50%低減し、その主な原因は、多くの公共事業が再生可能エネルギー設備を拡張したことであると報告している。

エネルギー転換の最後のけん引策は、資金調達である。グリーンファイナンスが導入されたのはわずか11年前だった。2013年までにグリーンファイナンスは110億ドルに達し、今年（2018）は1,500億ドルを超えると見込まれている。気候関連財務デスクロージャーも、低炭素社会や気候変動対応の投資への転換を奨励するうえで重要である。世界230の大手企業がすでに気候関連財務デスクロージャーに賛同している。開発途上国での持続可能な投資をけん引する最も重要な金融機関となりうるのは、国際開発金融機関（MDB）である。現在から2030年までにエネルギー部門で必要となる資金総額は、およそ25兆～30兆ドルにのぼる。金額を考慮すると、資金の大半は民間部門から調達しなければならないが、その際に必要なのはリスクの緩和を促進することである。MDBは各国が自由に投資をし、数兆ドルを活用するに際してリスクを低減、管理、共有して行くのに最適な機関である。

G20やG7の役割は重要となる。G20は、エネルギー転換を加速させる決定の形成を促し、国際金融機関と協力してパリ協定の施行を後押しできる。G20は、持続可能な成長戦略に結びつく気候変動対策に対するモチベーションの強化という、重要な役割を果たすべきである。またG20は、気候変動の緩和策と適応策の両方への投資のための十分な資金枠を確保しなければならない。今年、G20には3つの目標がある。1つ目は気候変動に対する回復力と適応の行動計画の作成である。2つ目は、G20は長期転換に注目し続けるということ。だが、どのような具体的目標に合意できるかは明確ではない。3つ目は、NDCの実行に必要な供給資金を査定することである。G7では、カナダは6月のG7サミットで気候変動を話題に上げるつもりである。また9月には環境大臣会合も開催される予定である。同会合では、海洋プラスチックごみ排除や持続可能な資金調達などの特定分野での合意を目指す。G7やG20の有効性は、気候アジェン

ダの多数の側面に対する米国からの抵抗により制約されるであろうから、大きな進展は望めそうにない。パリ協定の規則集への今年での合意など、COP枠内で進展し続けることが重要である。今後重要なのは、気候変動対策に関して強靱な行動をとるための連合を維持し、さらに言えば拡大することである。

(英語) English Summary drafted by Brookings Institution

<https://www.brookings.edu/events/us-japan-forum-challenges-for-the-global-economy-and-a-better-globalization/>.



US-Japan Forum: Challenges for the Global Economy and a Better Globalization

A joint conference organized and hosted jointly by the Japan Economic Foundation and the Global Economy and Development Program at the Brookings Institution

Friday, May 25, 2018

Stein Room, The Brookings Institution, 1775 Massachusetts Ave, NW,
Washington, DC

Summary of the Conference

Context for the Forum:

In recent years, a remarkable backlash against globalization has been observed in many parts of the world. Britain voted to leave the EU. The US administration has an ‘America First’ slogan. Recent elections in France, Germany, and Italy show the rise of public support for anti-globalization policies. At the same time, international cooperation to address global challenges has seen major milestones

through the Addis Ababa Action Agenda, UN Sustainable Development Goals, and the Paris Agreement on Climate Change. Moving towards a better globalization must address three challenges. It must promote a revival of global growth and a recoupling of growth with broad-based social advancement. It must foster innovation and the development of technology while tackling any adverse effects on work and combating rising inequality. It must deliver on the energy and climate agenda before the window for limiting global warming to less than 2 degrees closes.

Welcome and Opening Remarks

Speakers:

- Homi Kharas, Interim Vice President & Director, Global Economy and Development, Brookings Institution
- Kazumasa Kusaka, Chairman and CEO, Japan Economic Foundation

Summary of remarks:

The world is facing rapid change and many urgent challenges. The stock of infrastructure will be more than double over the next fifteen years. Urban population is rapidly increasing. Employment growth has not yet been able to catch up a demographic boom in Africa. We are seeing a situation of very low productivity growth. Decoupling of growth from carbon emissions is another challenge. We need long-term solutions for energy and climate. Low inflation, low real interest rates and technological advances give us a window of opportunity, but it is rapidly closing.

Globalization was suggested as a way to invigorate productivity, but it creates its own problems. Growth is becoming uncoupled from social stability. The share of capital is growing in national income as well as inequality in wages. We only see a small number of local workers in factories. In his book, *A Better Globalization*, Kemal Derviş concluded that it is important to look at the politics of globalization together with the economic forces (Derviş, 2005). All of us have to pursue a better globalization, but the question is “better for whom?”

We need speedy change, but speed can cause anxiety. We are in a period where policymakers are trying to slow things down because they fear the backlash from too rapid change. The world has seen tremendous changes in the last three years with the rise of populism and anti-globalism. We are facing a new style of

governance and international concerns over protectionism. We are perplexed as to what is the Trump phenomenon and whether a single leader can make a difference for better or worse.

Many potential solutions require more global cooperation. There is a need to mobilize various players both domestic and global in an inclusive manner, and not only economically, but also politically and socially as well. No government alone can deliver the climate goals and at the same time, no single president can stop the progress. In the history of the G7, the leaders with limited political capital in a democratic system needed an international agreement for domestically unpopular measures for their angry domestic constituencies to pass the necessary policy package. We need like-minded players and the software to wisely utilize them.

However, global cooperation has become difficult as we are in a period of high dispersion of global economic power among many countries including emerging economies. Economic concentration will grow again towards a G2 or G3, but the new configuration—the US, China, and India—do not constitute a like-minded group. Therefore, they may not see eye-to-eye on solutions and may be tempted to view solutions in relative political power terms rather than in economic terms.

Session 1: A Better Globalization

Key questions:

- How do participants view the prospects for strong, sustainable, balanced and inclusive growth against a backdrop of decelerating productivity?
- What policy measures are needed to renew domestic social compacts and tackle rising inequality?
- How can we restore trust and confidence in multilateral cooperation and multilateral institutions to deliver on better globalization?

Moderator:

Homi Kharas, Interim Vice President & Director, Global Economy and Development, Brookings Institution

Lead speakers:

- **Yoichi Otabe**, Advisor, NEC Corporation, Former Vice Minister for Economic Affairs in Japanese Ministry of Foreign Affairs
- **Jonathan Ostry**, Deputy Director of the Research Department, International Monetary Fund
- **Martin Baily**, Bernard L. Schwartz Chair in Economic Policy Development, Brookings Institution
- **Marilou Uy**, Director, Intergovernmental Group of Twenty-Four on International Monetary Affairs and Development (G-24)

Summary of discussion:

There are momentous changes in prospect for the global economy. We will put in place more new infrastructure than the entire stock of infrastructure today in the next 10-15 years. We are entering into a period of peak urbanization. More people are moving to cities than ever before in history. This is the last big growth spurt of people largely in African continent. With all of these trends, we have a window that pushes us to get things right, which will close in more or less a 15-year time frame.

Given the urgency of the challenges, the answer is not to slow down the process of globalization but to steer it in a way that we can tap its benefits and manage its risks. This leads to some practical questions on the forces of global changes such as productivity growth, rising inequality, the growing role of developing countries, and the challenges of debt sustainability.

Slowing productivity growth has been a concern due to its importance in driving economic growth. The slowdown has been associated with the global financial crisis, but there is some debate whether the slowdown in productivity growth occurred prior to the crisis. In the United States, the slowdown of productivity is attributable to the manufacturing sector, especially high-tech part of manufacturing. Manufacturing is no longer a big part of the economy but its contribution to productivity growth has still been very large. The high-tech part of manufacturing contributed disproportionately to growth in 1990s, but then slowed down, dampening overall productivity growth. It is much harder to make rapid transformation in the service industries than it is in the manufacturing industries. Importing technology and production methods is easier in manufacturing than in

services. Another reason for the slowdown is the end of the surge in productivity growth in the wholesale and retail sectors from the rapid growth in 1990s. Online retailers such as Amazon did not produce big productivity gains because their disruptive effects have overwhelmed the positive contribution to productivity. Weak aggregate demand was also a contributing factor to slow productivity growth (Remes et al., 2018).

Against this backdrop, the US did not follow conducive macroeconomic policies to support growth. When the economy is at full employment, a big fiscal expansion is not necessary and could eventually lead to a debt crisis. History shows us that tax increases do not hinder economic growth. We need workforce policies because the workforce is changing and the future of work is different. We need policies to enhance the skills of lower skill workers. This is essential to have both more inclusive growth and faster growth.

Technology is expected to have an important but uncertain impact on productivity growth. There are contrasting views exist on the prospect of productivity growth related to technology. One view is that we have already collected the low hanging fruit; therefore, it is harder to come up with new ideas (Bloom et al., 2017). Given the way that productivity has decelerated in the last few years, this argument gets a lot of force. The other view is more optimistic: technology will continue to develop and change society (Mokyr, 2014). We may not get back to the golden era—the period after World War II, but it does not mean that we do not expect somewhat faster productivity growth going forward. We will have faster growth ahead because the impact of digital technologies will gradually spread through the economy. Technology is causing disruptions and the productivity payoff may eventually come.

Another key question is the impact of globalization and technology on inequality. Trade and technology have received much attention as the drivers of inequality, but financial globalization which has not drawn as much attention has also played an important role in driving growing inequality at the national and global levels. An economic analysis of both the aggregate and distributional effects of financial globalization shows that financial globalization's pie-enhancing effects are limited but the distributional effects are quite salient (Furceri et al., 2018). Going for growth and assuming that distributional inclusion will look after itself is quite a dangerous gamble.

Financial globalization needs to be a part of the discussion of the benefits and costs of globalization. It is necessary to look at the aggregate and distributional effects of all the policies we recommend at the same time. We need to consider policies where growth can be enhanced and the equity cost can be reduced. A range of complementary policies to manage globalization including so-called trampoline policies such as job training and assistance with search need to be considered.

Developing countries face different impacts from global changes than advanced economies. For many developing countries, the key question is how to actually gain access to technology and how best to harness technology for growth. Many countries are experiencing worsening inequality, inadequate job creation and increased unemployment among the youth. The concerns about inequality are coupled with how to create more employment and how to protect those adversely affected by technological change. National policies will matter, but there is also the question about the role of the multilateral community in supporting much better technological diffusion and helping countries create the conditions to tap the opportunities from technological change.

For the financing of development, domestic resource mobilization in developing countries is crucial. In addition to domestic tax reform efforts there is a need for effective international tax cooperation. There is progress being made on international tax cooperation but more needs to be done to hear the voice and concerns of developing countries in setting rules and to build the system in a way that developing countries can collect their fair share of global tax revenues. Multilateral development banks should play a catalytic role in mobilizing financing not only in low-income countries but for the whole set of emerging market and developing countries.

The sustainability of debt is a key challenge for financing of development. Given their huge financing needs, developing countries need to necessarily rely on the use of debt. If debt is used properly and effectively, it will pay for itself, but the problem is that little is known whether it is being invested in the projects that would yield commensurate returns. The global community needs to assess better what is happening to debt, how debt sustainability can be achieved, what more could official sector and the creditor community can do to exercise more responsibility and put in place mechanisms that would promote more resilience in the debt structures of countries, and improve creditor coordination and responsibilities when lending to developing countries.

The trends and forces of global changes differ depending on the circumstances. Frontier firms face different problems from the rest of the firms. Manufacturing has different challenges from service industry. Developing countries face different circumstances than advanced economies. With all these kinds of differences, multilateral cooperation is not something that can be discussed in the aggregate and in the abstract. We need to make policy choices that push forward global cooperation recognizing the differences across the different parts of the system.

Luncheon Talk

Speaker:

Kemal Derviş, Senior Fellow, Global Economy and Development, Brookings Institution

Summary of talk:

We are in a very difficult phase and a very new phase. There are five elements that make the current world and globalization difficult.

First, there is fundamental structural change underway in terms of national weights of the world economy. Globalization started in 1990s when the Soviet Union and its satellites opened up to the global markets in a market-oriented way. The US became all powerful in many ways. It was also the period when the convergence process of developing countries with advanced economies really started. If we look at the world today, and compare it to the early 1990s, we truly have a multipolar world in several aspects.

China rivals the US as an economic power, and projections are that China will continue to grow much more rapidly. China will become preeminent in the next 10 to 20 years if there will be no major crisis in China. We still have Russia as a military power. If we take into account military power and military activity, Russia is definitely one of the big guys. The European Union is still larger economy than the US. It is an actor that sometimes is able to act in a united way, but sometimes not. The US remains the fourth pole but in a more multipolar world. When we think of global governance, we have a very different basic architecture in terms of nation states than we had before. When we discuss the IMF, the World Bank, G20, G7, and the WTO, we have to remember that this is against the background of a

much more multipolar world.

Second, in terms of trade and regulation, most of the easy trade liberalization has been done. Tariffs have been reduced everywhere substantially. The whole topic of trade negotiation has to do much more with regulation and behind-the-border issues. This is fundamental difference from the trade negotiations we had before because it has to do with issues which nation states believe are their domain. The next step has to do with regulation than traditional trade policy, and it will be much more difficult. One issue is how much uniformity in regulation is needed in the global economy. There are valid and legitimate differences in preferences among countries regarding privacy, income distribution, and the role of the state. What will be needed is to take account of these preferences. However, it cannot go so far as to fragment the whole global economy into separate sub-economies that are regulated in different ways. We must find the right balance between trying to respect preferences while ensuring that the global market does not suffer from too much segmentation.

Third, there have been fundamental changes in the cost curves in important activities. Many of the tech giants tend to be natural monopolies as their cost curves or the fixed costs are very high but marginal cost is very low. To regulate this kind of cost structure is much more difficult than to regulate the firms which have more traditional cost curves with marginal costs that are not close to zero. There is no easy answer. This point is interlinked with the trade and regulation point. What kind of competition policy do you try to impose with these kinds of cost curves? Do we try to facilitate entry? What if the fixed costs are very high?

Fourth, consumer surplus is much larger than it used to be. When we look at the welfare of economy as opposed to GDP, we must look at consumer surplus. Consumer surplus today is extremely large in many of the new sectors. Many sectors are more differentiated and require a more tailored approach. It is not easy to find a way to regulate markets where consumer surplus plays a big role.

The fifth point is that the more open an economy wants to be, and the more competitive it wants to be internationally, the more social solidarity is needed nationally (Rodrik, 1998). Emmanuel Macron, who went all out for openness and for international cooperation, will have to link his liberalizing policy package with a policy package of social solidarity. The idea of a universal basic income is to have a system of national solidarity. This is an interesting approach because it combines

the protection of an individual with the ability of the individual to be very mobile, to go from one job to another, from one town to another.

These changes show how different will be the world that we are heading towards, and how difficult it will be to elaborate policies at the national level and at the international level. One does not have to internationally regulate unless there are spillover effects. However, the spillover effects are very important, and are becoming more important. New technology demands new insights in terms of spillover and interactions. We have to find a way to deal with data management and data privacy, which respects national preferences and is globally workable. International cooperation will be extremely important due to spillovers.

The next 10 years will be a period that humanity will try to find new institutions or adapt existing institutions to these new challenges. Japan and the US are still very important in this game. I am not very optimistic for the coming few years because of neo-nationalism in many places. Bringing big international issues in front of the local voters and hoping to get some mileage is extremely difficult. I hope it will not take a big bad event to wake up people to the need for stronger global cooperation. The most intriguing force is the new nature of production of cost curves and of consumer surplus, and how that will influence regulation, both nationally and internationally.

Session 2: Future of Work

Key questions:

- What are the implications of globalization, technological change, and demographic transition for employment, wages, and inequality?
- What are the implications for skills and life-time learning?
- How does the changing nature of work affect developing countries' development pathways?

Moderator:

Naoyuki Haraoka, Executive Managing Director, Japan Economic Foundation

Lead speakers:

- **Mayumi Fukuyama**, General Manager, CIO, Technology Management Center, Technology Strategy Office, Hitachi Ltd. Research & Development Group
- **Shahid Yusuf**, Chief Economist of The Growth Dialogue, George Washington University School of Business
- **Darrell West**, Vice President and Director, Governance Studies, Brookings Institution
- **Indhira Santos**, Senior Economist, Social Protection and Labor Global Practice, The World Bank

Summary of discussion:

There are two major trends underway with important implications for employment, wages, and inequality. The first trend is technological innovation. Robots, artificial intelligence, algorithms, and automation are changing work in many sectors. The second is a shift in business models. We are observing a reliance on temporary workers, the introduction of lean management styles, and a management approach based on flattening organizations.

If we make the right economic and political reforms, we could end up in a great place by 2050. History shows that it is possible. The United States underwent a similar “revolution” when it moved from an agrarian to an industrial economy. A series of both economic and political reforms enabled it to end up in a better position after several decades of chaotic change. Economic reforms included the establishment of the social security system, unemployment insurance, expansion of the education system, and political reforms included expansion of the electorate and the constitutional amendment for the legalized income tax.

To deal with the current challenge, America has to move from individual responsibility to social responsibility, and to make sure that people are not left behind in the transition to the digital economy. We have several policy levers for this including worker retraining and lifetime learning. A more radical lever is a solidarity tax, a one percent wealth tax on the top one percent of Americans in terms of wealth (West, 2018). The current political system is not equipped for this, but a series of policy reforms would enable this change.

Digital transformation has become a feature of the industrial economy in many countries with the digitalization of industrial and social infrastructure

accelerating throughout the world. The government of Japan has put forward a concept called Society 5.0, which is a new human-centered society while resolving social issues such as labor shortage and increasing social security cost. In last year, the reforms to achieve Society 5.0 were adopted by the cabinet. The five pillars of Society 5.0 are healthcare/medical/nursing care, mobility, production, infrastructure and urban development, and finance. Against this backdrop, the Hitachi Group developed a digitized system to improve workers' happiness based on the data. The test of the system confirmed that AI-based advice given to participants contributed to livelier workplace. This shows the positive side of digital technology.

Unlike Japan's optimistic view on technology, many other countries, especially developing countries, however, have not positioned themselves to take the full advantage of the opportunities that new technologies offer. It is doubtful whether "the great convergence" is likely to occur quickly (Baldwin, 2016). Baldwin suggests that the new globalization is driven by information technology, which has significantly reduced the cost of moving ideas across borders. However, some factors make us wonder whether this will happen. First, growth in trade, especially merchandise trade has slowed, and there is no anticipation of a substantial acceleration of trade. Second, new trade barriers are springing up and this will be an additional brake on the growth of trade. Third, there is a much greater likelihood of increased localization. Much more production will be concentrated in a few countries. Associated with that is the desire of greater customization of products. Automation will help in this regard. Lastly, advanced economies have the desire to try and safeguard manufacturing.

The benefits of new technologies are not going to developing countries. The share of manufacturing in GDP in Ethiopia, Kazakhstan, Pakistan, and South Africa has been flat or on the way down in recent years. What can these countries do to reverse this trend? Finding manufacturing niches is one approach but difficult to achieve in a fast-changing world. The use of digital technology in agriculture can provide opportunities for growth, but it will displace many people. Developing digital services may be possible but will require a substantial upgrading of certain kinds of skills. Under these circumstances, more efforts are needed to develop skills using distance learning as a way of trying to reach a broader mass of the population. One question is whether you could make a huge difference in a short period of time given the limited supply of high quality teachers. The other area is R&D. Most developing countries are not investing much in R&D. Closing the infrastructure

gap would also be a positive factor for these countries, but given the resources that are available, it is not likely to be closed quickly. In addition, the impact of financial technology and access to financial services that have been made available through the availability of telecommunication and digital technologies such as in East Africa is not yet evident on productivity or growth.

We tend to focus on advanced countries when it comes to the fear about technology, but in developing countries, the problem is how little technology is around. Even though the spread of technologies has been faster than the past, the adoption rates are very low, and the productive use of those technologies even lower. For example, only around 30 percent of the firms in the developing countries have data use technology. While polarization is an issue in advanced economies, developing countries have a mixed story. In many developing countries, we still see the increase in the share of employment for routine skills despite the introduction of machines. The question is whether the share of employment in developing countries will peak at a level where the demand of those skills will be lower than what it was in advanced countries.

The other question is skill provision. For example, literacy rates are very low in many African countries. Policymakers face a difficult question of tradeoffs between investing in current workers and investing in the future generation. The answer will depend on where you are. In some developing countries, current workers have a very low literacy rate, or start working at a very young age. The fear of inequality is another issue. Although inequality has not increased in recent years, people feel that inequality may increase in the future. The forthcoming World Development Report 2019 suggests how new domestic social contracts can be used to address this issue.

Policymaking to address changes in labor markets has some gaps. A meta-analysis shows that only about a third of the labor market programs are effective in terms of improving employment or the quality of employment. The approach to social insurance and assistance needs to be different in developing countries than that in advanced economies. In some countries, 80-90 percent of jobs are in the informal sector. A system that may look great on paper would not be effective in terms of protecting people in these countries. So, more work and debate is needed on how to set policies that can develop skills and protect employment in a changing world.

Session 3: Energy and Climate

Key questions:

- What are the prospects for and what actions are needed to keep the global climate goal on track?
- How can we accelerate the shift to low-carbon energy systems taking advantage of rapidly developing technologies?
- How can policy support and financing from international institutions help accelerate countries' implementation of NDCs?

Moderator:

Kazumasa Kusaka, Chairman and CEO, Japan Economic Foundation

Lead speakers:

- **Nathan Hultman**, Director of the Center for Global Sustainability and Associate Professor, University of Maryland School of Public Policy
- **Yoriko Kawaguchi**, Fellow, Musashino Institute for Global Affairs, Musashino University, Former Minister of Foreign Affairs of Japan
- **Amar Bhattacharya**, Senior Fellow, Global Economy and Development, Brookings Institution

Summary of discussion:

The Paris Agreement was a game changer. The Agreement changed the narrative of climate change from the “costs of action” to “investment and growth” building on the broader commitment to the sustainable development goals embodied in the 2030 development agenda and financing for development in Addis in July 2015. The goal of the Agreement is to hold the increase in global average temperatures to below 2 degrees and to achieve net zero emissions in the second half of this century. While action is happening there is still a large gap between current actions and what is required to reach the Paris temperature targets; the total emissions based on the current pledges coming out of the Paris Agreement, which is 55-60 GTCO₂ per annum, is better than the business usual, which is 60-68 GTCO₂ per annum, by 2030, but the total emissions needs to be around 40 GTCO₂ to reach the Paris temperature target by 2030.

The US announcement of its withdrawal from the Paris Agreement last year posed a big challenge. The withdrawal has not formally happened yet, but it is the intent of the Trump administration of not implementing new policies in the United States that would drive down emissions. The impact of this change is significant because the US was one of the leaders of the negotiation of the Paris Agreement, and played an important role in implementing the financial contributions for developing countries.

In shaping its commitments under the Paris Agreement, the previous US administration relied heavily on executive actions to implement laws that had already been passed but that had been interpreted and implemented in different ways with respect to greenhouse gas emissions. For example, the Clean Power Plan was a regulatory action based on an existing law called the Clean Air Act, which has been around since 1970. President Trump has said that because this was an executive action and that was promulgated out of an executive agency, he has the ability to not implement it or roll it back or to withdraw the regulatory action. The Clean Power Plan has been put on hold and will likely be rescinded. Another area where the US has reversed policy is on transportation emissions rules. There are a set of regulations that govern the fuel efficiency of vehicles in the US. The Environmental Protection Agency has announced its intent to relax the rules that had been set by the previous administration. The new administration is looking systematically at all of the various regulatory actions of the Obama administration with the intent of either rescinding or not implementing those regulatory actions. However, part of the complication of the US system is that all of these steps have a very complicated legal process. Therefore, they cannot just cancel it. There has to be a process and this could be a long and slow process.

It is a loss to not to have that federal leadership in the US, but non-federal level has become very active in climate actions. After the announcement last year that President Trump will pull out of the Paris Agreement, within 72 hours, a coalition called “We Are Still In” was launched. The “We Are Still In” now represents 2,700 cities, states, and businesses across the United States. The coalition represents 159 million people, over 50 percent of the US GDP and if you add it all up, accounts by GDP the equivalent of the world’s fourth largest economy. These actors together have a significant potential impact and they have some significant policy levers at the state level. The coalition will release a report in September that will convey the analysis of what the remaining federal action plus all of non-federal actions will actually add up to. This assessment will be interesting not only for the amount

of reductions that we might see just from those pledges but some ramped up or more ambitious pledges that are likely to happen in conjunction with the California Climate Summit in September and the UN Secretary General's Summit next year. What we are seeing is that these sub-national actors are taking much greater responsibility for building the foundations of what could be a sustained longer-term effort to decarbonize the US economy.

The US needs to pay greater attention to the security aspects of climate change. China will play a huge role in energy policy and energy security. China is the largest producer of electric vehicles and of equipment for renewable energy. The strength of the US in energy policy is the build up of natural gas and the ability to protect sea lanes, which is important for oil transportation. With China having a huge role in renewables, this power base will shift.

Energy plays a key role to achieve the goal of the Paris Agreement because energy accounts for roughly 70 percent of total emissions. We face two major challenges in accelerating energy transitions. First, energy access has to be improved. Approximately 100 GJ of primary energy per capita per year has been required to achieve reasonable energy access, but if everyone consumes 100 GJ, we would not be able to deal with carbon footprint (Energy Transitions Commission, 2017). The second challenge is decarbonization. There is no doubt that coal will be completely phased out and it will be driven by market forces. Oil consumption will decline but at a lesser rate. Natural gas will continue to grow as a back-up source and this is in the interest of the US.

Policy plays a key role for a fundamental shift in energy. Carbon pricing is absolutely critical. The High-Level Commission on Carbon Prices concluded that we should have a carbon price in the range of 40-80 dollars in the short run and 50-100 dollars in the medium term (Carbon Pricing Leadership Coalition, 2017). Carbon pricing has to be complemented by regulations including fuel efficiency standards, subsidies for the poor people, and policies for adoption of better technologies. The other is fossil fuel subsidies. If you eliminate all fossil fuel subsidies, you would cut emissions by about 37 GTCO₂ (Gerasimchuk et al., 2017).

Technology is another driver of energy transition. There has been much stronger than anticipated development of renewable energy technologies with consequently rapid cost reduction. Since June 2017, there has been 9 GW of renewable energy installed in the US including 2.1GW in just January and February. Market forces

are acting against coal. There are roughly 50,000 coal mining jobs in the US. The total amount of coal employment is only about 150,000 total even if you include coal-fired power plant and other extended economy. If you contrast that to solar and wind, each of those has roughly 150,000 employed and it is estimated that there are around three million clean energy jobs in the US which includes installed efficiency and other kinds of jobs. Coal has witnessed a tremendous slow down over the last decade and this trend has been accelerating in the last couple of years. The Bloomberg New Energy Finance estimated that half of all coal units are now running at a net loss over the last six years (Ryan, 2018). GE reports that demand for base gas-fired combined cycle turbines went down by 50 percent compared to what they thought a year ago and that's attributed primarily to the fact that many utilities have expanded renewable energy installation.

The last driver is finance. Green finance was launched just 11 years ago. It reached 11 billion dollars by 2013, and this year will be more than 150 billion dollars. Climate-related financial disclosure is also important to incentivize the shift towards low carbon and climate resilient investments. Two hundred and thirty major companies of the world have already signed up to this. The most important driver of finance of sustainable investments in developing countries potentially are the multilateral development banks (MDBs). The amount of money that we need in the energy sector between now and 2030 is in order of 25-30 trillion dollars. Given this size of required funds, most of the finance needs to come from the private sector, but that will require enhanced risk mitigation. MDBs are best placed to help countries unlock investments and reduce, manage and share risks to help leverage the trillions.

The role of G20 and G7 will be crucial. The G20 can help shape the decisions to accelerate change and push for implementation working with the international financial institutions. G20 should play a key role in raising the ambitions on climate action linked to sustainable growth strategies. It should also ensure that there is an adequate financing framework to deliver on investments for both climate mitigation and adaptation. This year, the G20 have three goals. The first is to draw up an action plan on resilience and adaptation. Second the G20 will continue to focus on long-term transitions but it is not clear what tangible goals can be agreed upon. The third is assessing the financing needed to deliver on the NDCs. In the G7, Canada aims to raise climate at the G7 Summit. There will also be a meeting of Environment Ministers in September that will seek to reach agreement on some specific areas including eliminating plastic waste from oceans

and sustainable finance. The efficacy of the G7 and G20 will be circumscribed by US opposition to many parts of the climate agenda, so no major breakthroughs can be expected. It is important to continue to press forward within the COP framework including on reaching agreement on the rulebook of the Paris Agreement this year. It will be important to maintain and indeed widen the coalition for strong climate action.

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Background Materials

Session 1: A Better Globalization

Key questions:

- How do participants view the prospects for strong, sustainable, balanced and inclusive growth against a backdrop of decelerating productivity?
- What policy measures are needed to renew domestic social compacts and tackle rising inequality?
- How can we restore trust and confidence in multilateral cooperation and multilateral institutions to deliver on better globalization?

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Furceri, D. et al. 2018. “The Aggregate and Distributional Effects of Financial Globalization: Evidence from Macro and Sectoral Data” IMF Working Paper. Available at: <http://www.imf.org/en/Publications/WP/Issues/2018/04/11/The-Aggregate-and-Distributional-Effects-of-Financial-Globalization-Evidence-from-Macro-and-45772>

Causa, O. 2016. “Another Look at the Growth and Inequality Nexus”. *Japan SPOTLIGHT*. July / August 2016. Available at: https://www.jef.or.jp/journal/pdf/208th_Special_article_01.pdf

“In the Midst of Geopolitical Turmoil, an In-Depth Look at Trends in the Global Economy Could Lead to a New Capitalism: Interview with Anatole Kaletsky”. *Japan SPOTLIGHT*. January / February 2018. Available at:
https://www.jef.or.jp/journal/pdf/217th_Cover_Story_01.pdf

Session 2: Future of Work

Key questions:

- What are the implications of globalization, technological change, and demographic transition for employment, wages, and inequality?
- What are the implications for skills and life-time learning?
- How does the changing nature of work affect developing countries’ development pathways?

Background materials:

Yusuf, S., 2018. “Can the new world of work be rendered inclusive?” Available at:
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West, D. and Allen, J. 2018. “How artificial intelligence is transforming the world” April 2018. Available at: <https://www.brookings.edu/research/how-artificial-intelligence-is-transforming-the-world/>

“Enhancing Human Capacities by Artificial Intelligence (AI) to Meet New Challenges in an Age of Uncertainty: Interview with Kazuo Yano, Corporate Officer & Corporate Chief Scientist, Hitachi Ltd. Research & Development Group”. *Japan SPOTLIGHT*, July / August 2016. Available at: https://www.jef.or.jp/journal/pdf/208th_Cover_04.pdf

Yanagawa, N. 2016. “Will AI Take Away Jobs from Human Beings?” *Japan SPOTLIGHT*,

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Baldwin, R. *The Great Convergence: Information Technology and the New Globalization*. Harvard University Press. Summary presentation available at: https://www.rieti.go.jp/en/events/17080101/pdf/k-2_baldwin.pdf

Session 3: Energy and Climate

Key questions:

- What are the prospects for and what actions are needed to keep the global climate goal on track?
- How can we accelerate the shift to low-carbon energy systems taking advantage of rapidly developing technologies?
- How can policy support and financing from international institutions help accelerate countries' implementation of NDCs?

Background materials:

Stern, T., 2018. "The future of the Paris climate regime" Available at: <https://www.brookings.edu/on-the-record/the-future-of-the-paris-climate-regime/>

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7. 発表資料

パワーポイントスライド

Session 1: A Better Globalization

- ① Jonathan Ostry, Deputy Director of the Research Department, International Monetary Fund

Session 2: Future of Work

- ② Mayumi Fukuyama, General Manager, CIO, Technology Management Center, Technology Strategy Office, Hitachi Ltd. Research & Development Group

Session 3: Energy and Climate

- ③ Amar Bhattacharya, Senior Fellow, Global Economy and Development, Brookings Institution

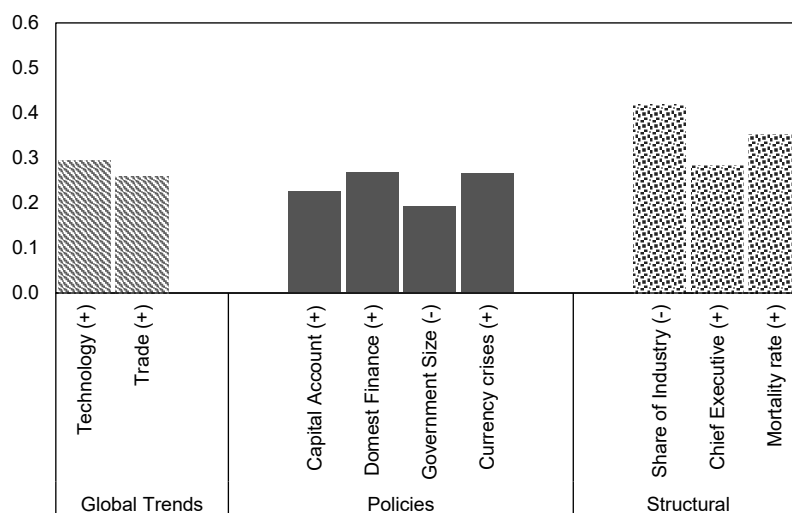
INCLUSIVE GLOBALIZATION & POLICY

Jonathan D. Ostry
International Monetary Fund

Challenges for a Better Globalization
The Brookings Institution
Washington, DC, May 25, 2018

Views expressed in this presentation are those of the author and should not be attributed to the IMF. This presentation draws on joint work with Andy Berg, Davide Furceri, Siddharth Kothari, Prakash Loungani and Haris Tsangarides.

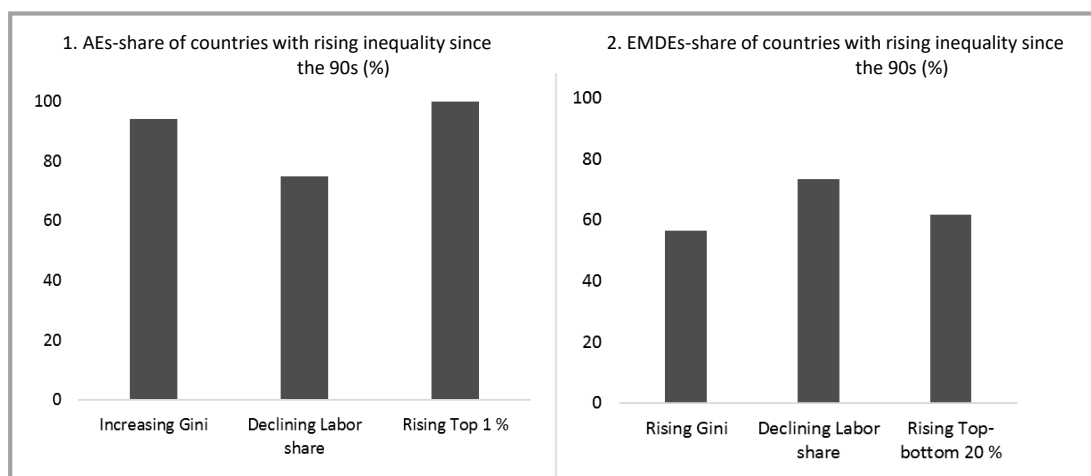
POLICIES ARE A KEY DRIVER OF INEQUALITY



Determinants of the Gini measure of inequality based on a panel regression (90 countries; 5-year averages over 1970-2015 period) estimated using weighted average least squares. Each bar shows the percentage point increase in the Gini from a 1 standard deviation increase in the variable.

Global trends: 'Technology' is share of ICT capital in total capital stock; 'Trade' is openness variable from Penn World Tables. Policies: 'Capital Account Liberalization' is measured using the Chinn-Ito Index. 'Domestic Financial Reform' is measured as in Ostry et al (2009). 'Government Size' is share of government in GDP; note (-) impact: higher government size reduces inequality. 'Currency crisis' is from Laeven and Valencia; Structural: 'share of industry' is manufacturing value added in GDP; 'Chief Executive' indicates whether govt. head is a military officer; 'mortality rate' (commonly included in inequality regressions). Source: Ostry, Furceri & Loungani (2016).

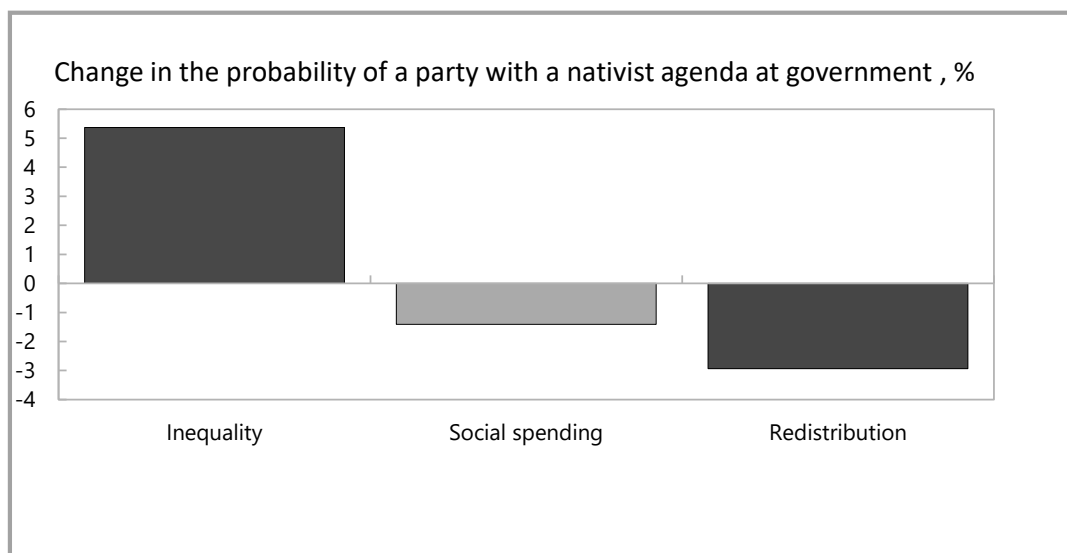
Globalization Rising; Inclusion Falling



Increased inequality makes growth more fragile (Berg & Ostry, 2011; Ostry et al., 2014)

3

Fuelling support for protectionism



Note: estimates based on a panel regression framework relating inequality (social spending, redistribution) with the probability of a party with a nativist agenda at government for a sample of 164 countries over the period 1990-2012. The effects of inequality (social spending, redistribution) are based on their interquartile differences and panel regression coefficients. Social spending=education and health spending as share of GDP; Redistribution=difference between market and net Gini.

4

RELATIONSHIP OF FINDINGS TO ONGOING DEBATES

- Great concern has been voiced about inequality recently -- impact on social cohesion; political capture by elites, etc.
 - Our finding: there is a direct **economic cost** to inequality -- it leads to lower and less durable growth
- Retreat from globalization (Brexit, Trump etc.)
 - Concerns about distributional effects of trade
 - Protests against migrants
 - Our finding: the effects of financial globalization should be part of the discussion -- it contributes as much to inequality as trade; it lowers workers' bargaining power and income share
 - In fact, financial globalization can make it difficult to mitigate distributional effects of international trade - it leads to a race to the bottom in taxation, eroding revenues needed for social benefits

5



**EFFICIENCY-EQUITY TRADEOFFS:
FINANCIAL GLOBALIZATION**

FINANCIAL GLOBALIZATION: TWO PUZZLES

- **Financial globalization works well in theory, not so well in practice**

Theory predicts output (efficiency) gains from both trade and financial globalization, but gains from latter have proven difficult to demonstrate.

- ❑ Stiglitz: “Preconditions to make financial globalization work are lacking in many countries.”
- ❑ Rodrik: “The association between capital account convertibility and economic growth is weak at best...there is a strong association between financial globalization and financial crises over time”
- ❑ Krugman (May 2017): “financial globalization hasn’t been the force for good that trade has been”
- ❑ Martin Wolf (2004): “the gains [from financial globalization] have been questionable and the costs of crises enormous.”
- ❑ Eichengreen et al. (2001): evidence of a positive association between capital account liberalization and growth is “decidedly fragile.”

- **Enormous literature on impact of trade on inequality, while financial globalization gets a free pass.**

Financial globalization can affect inequality in theory; shouldn’t we look at whether it does so in practice?

7

CONTRIBUTIONS

We search for output effects: giving theory a chance

- Use both de jure and de facto measures of financial globalization
 - Large changes in de jure measures = policy changes
 - Supplement with information on capital flows (de facto measure)
- Use sectoral as well as aggregate data, since causal effects hard to establish in macro data
 - Use of country-time fixed effects allows for cleaner identification of effects of financial globalization
 - Better identification of channels through which effects of financial globalization operate
- Trace out evolution of output in aftermath of major financial globalization episodes rather than look for permanent growth effects (Henry 2007).

We don’t turn a blind eye to distributional effects: taking the theory seriously

- Impact on Gini coefficient (aggregate data) and labor shares (aggregate and sectoral data)

Bottom-line: Some evidence of output effects (better identification than in previous work helps), but also strong distributional effects.

8

IDENTIFICATION OF POLICY-DRIVEN GLOBALIZATION EPISODES

- Policy restrictions on cross-border transactions are reported in the *IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER)* database.
- Information in *AREAER* is combined by Chinn and Ito to construct an index of capital account restrictions.
- Examining behavior of output (or inequality) before and after removal of major policy restrictions requires information on when restrictions were lifted; difficult to do for large sample of countries.
- We infer timing of major policy changes by looking at large changes in the Chinn-Ito index (Kaopen)
 - Assume liberalization takes place when, for a given country at a given time, the annual change in the Kaopen indicator exceeds by two standard deviations the average annual change over all observations.
- ➔ This criterion identifies 224 episodes (over 1970-2010)—the majority occurring in the early 90s (when inequality started to increase).
- ➔ Examples: several EU countries in the early 1990s; India and Brazil in the mid- and late 1990s.

9

EMPIRICAL STRATEGY—MACRO LEVEL DATA

Baseline:

$$g_{it} = a_i + \gamma_t + \sum_{j=0}^l \delta_j D_{i,t-j} + \sum_{k=0}^l \vartheta_k X_{i,t-k} + \varepsilon_{it}$$

Role of country-specific factors:

$$g_{it} = a_i + \gamma_t + \sum_{j=0}^l \vartheta_j X_{i,t-j} + \sum_{j=0}^l \delta_j^- D_{i,t-j} G(z_{it}) + \sum_{j=0}^l \delta_j^+ D_{i,t-j} (1 - G(z_{it})) + \varepsilon_{it}$$

g = change in log output (Gini);

D = liberalization episode;

X = baseline: current and lagged reforms in trade, current account, product and labor market;
robustness checks: baseline + growth expectations + other controls.

G = smooth transition function ($G = 1 \Leftrightarrow$ (extremely) low financial liberalization/inclusion, crises).

Estimates based on OLS and IV (liberalization in trading partners and initial degree of openness) for 149 countries for the period

10

EMPIRICAL STRATEGY—SECTORAL LEVEL DATA

Baseline: $g_{jit} = a_{ij} + \gamma_{it} + \rho_{jt} + \sum_{k=0}^l \delta_k S_j D_{i,t-k} + \varepsilon_{jit}$

i (country); j (sector); t (time).

g = change in log output (labor share of income);

D = liberalization episode;

S = external financial dependence (EFD); natural-layoff rate (NL); EOS between capital and labor.

Theoretical predictions:

(i) output (labor share) effects are larger for industries with higher EFD—*demand for external funds*;

(ii) labor share effects are larger for industries with higher NL—*bargaining power*;

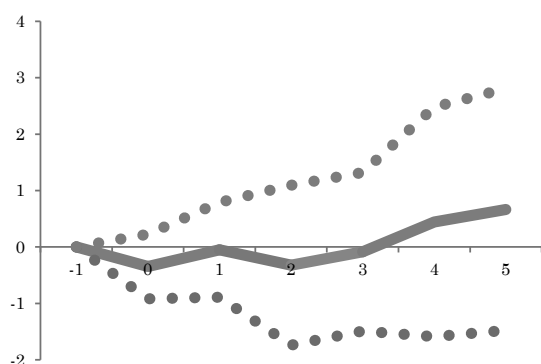
(iii) labor share effects are larger for industries with $EOS > 1$ —*cost of capital*.

Estimates based on OLS using sectoral data for 23 AEs, 25 industries, 1975-2010.

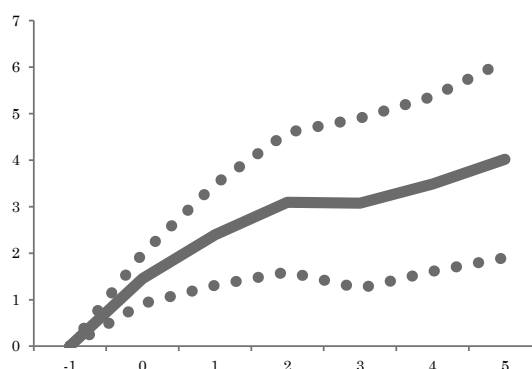
11

Insignificant output gains but significant increases in inequality

Panel 1. Output (%)



Panel 2. Gini (%)

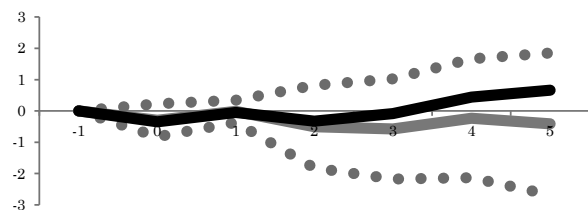


Note: The solid lines indicate the response of output (inequality) to a capital account liberalization episode; dotted lines correspond to 90 percent confidence bands. The x-axis denotes time. $t=0$ is the year of the reform.

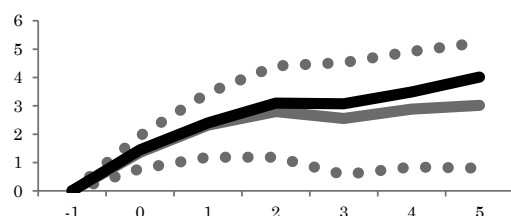
12

...the results are robust to endogeneity checks

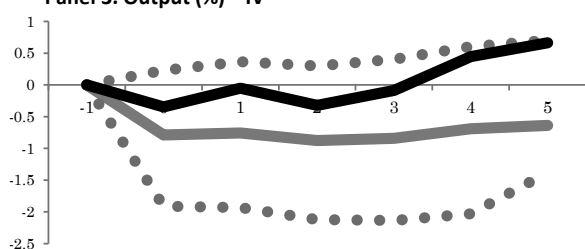
Panel 1. Output (%)—controlling for growth expectations



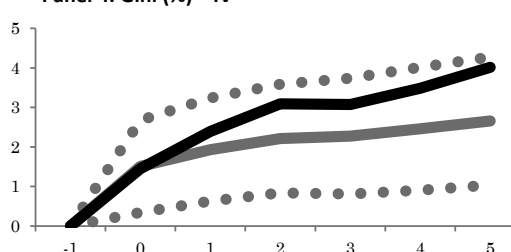
Panel 2. Gini (%)—controlling for growth expectations



Panel 3. Output (%)—IV



Panel 4. Gini (%)—IV

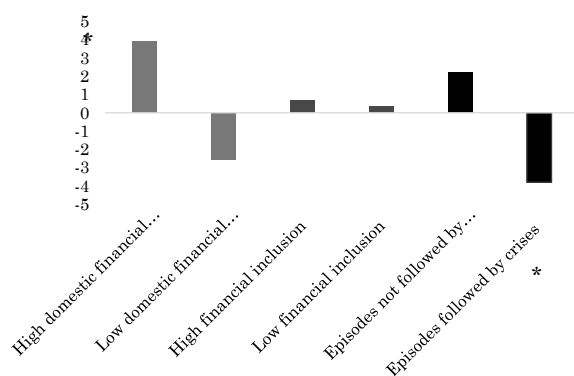


Note: The solid lines indicate the response of output (inequality) to a capital account liberalization episode; dotted lines correspond to 90 percent confidence bands. The solid black lines denote the baseline effect.

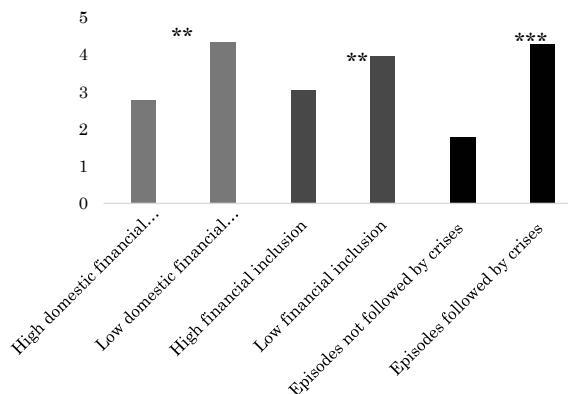
13

But output & distributional effects depend on institutions

Panel 1. Output (%)



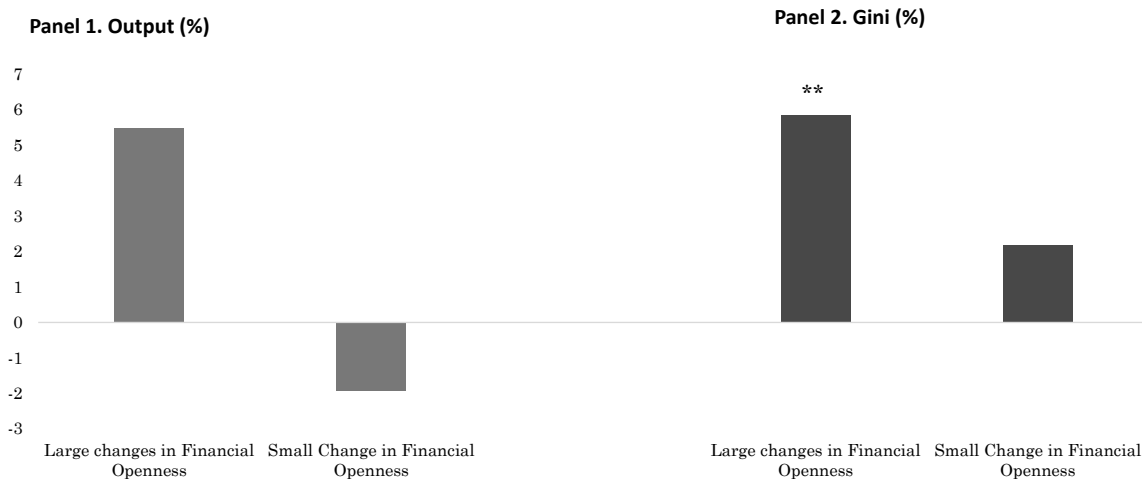
Panel 2. Gini (%)



Note: Medium-term effects (that is, after five years of the reform). ***, **, * denote significance at 1 percent, 5 percent and 10 percent, respectively.

14

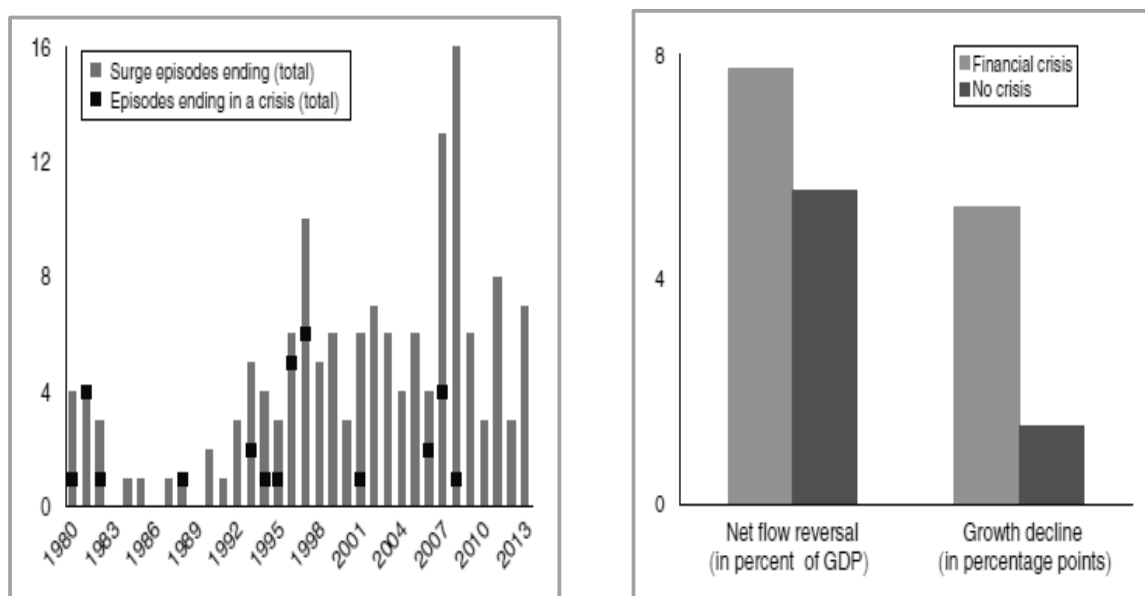
... and on the extent of capital flows (de facto measure)



Note: Medium-term effects (that is, after five years of the reform). ***, **, * denote significance at 1 percent, 5 percent and 10 percent, respectively. Blue (red) bars denote the medium-term response (that is, five years after the reform) of output (inequality). Flows defined as the cumulative 5-year change in total asset and liabilities as percent of GDP after the reform.

15

CAPITAL SURGES AND FINANCIAL CRISES

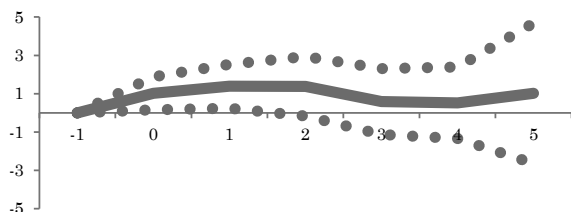


The panel on the left shows the total number of surges ending in a given year and those that end in a financial crisis. The panel on the right compares capital flow reversal and growth between surges that end in a crisis and those that do not. The analysis is based on data for 53 emerging market economies over 1980-2014. Source: Ghosh, Ostry and Qureshi (AER P&P, 2016)

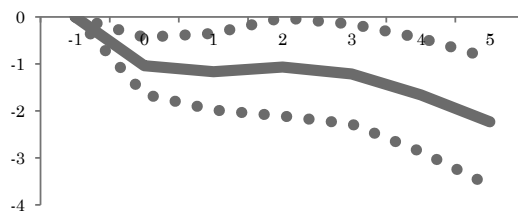
16

Sectorally, short-term output gains, significant decline in labor share

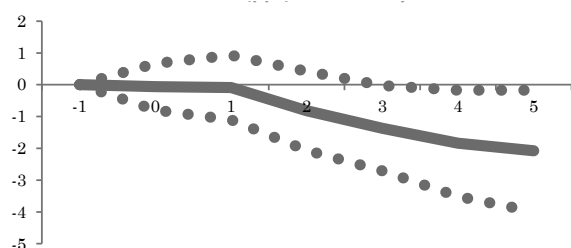
Panel 1. Output (%)—external financial dependence



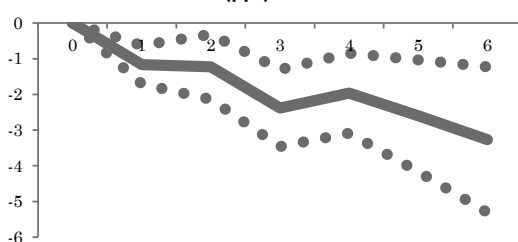
Panel 2. Labor share (ppt)—external financial dependence



Panel 3. Labor share (ppt)—natural layoff rate



Panel 4. Labor share (ppt)—EOS >1

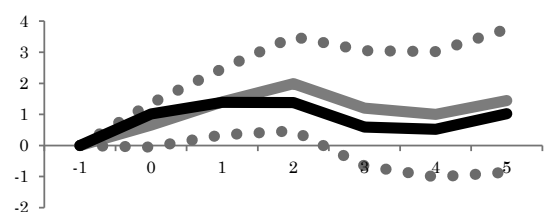


Note: Solid line denotes the differential effect of capital account liberalization episodes between a sector with a high external financial dependence/layoff rate/elasticity of substitution (at the 75th percentile) and a sector with a high external financial dependence/layoff rate/elasticity of substitution (at the 25th percentile).

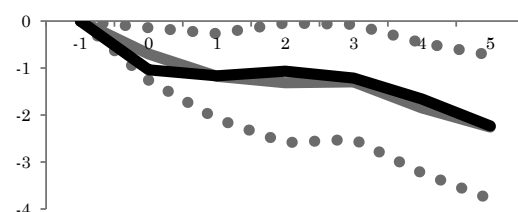
17

Results robust to controlling for domestic finance reforms...(and trade reforms, and technology)

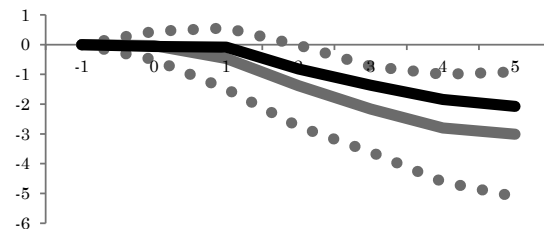
Panel 1. Output (%)—external financial dependence



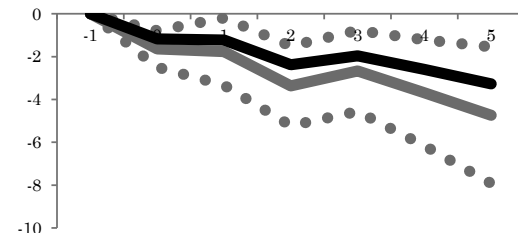
Panel 2. Labor share (ppt)—external financial dependence



Panel 3. Labor share (ppt)—natural layoff rate



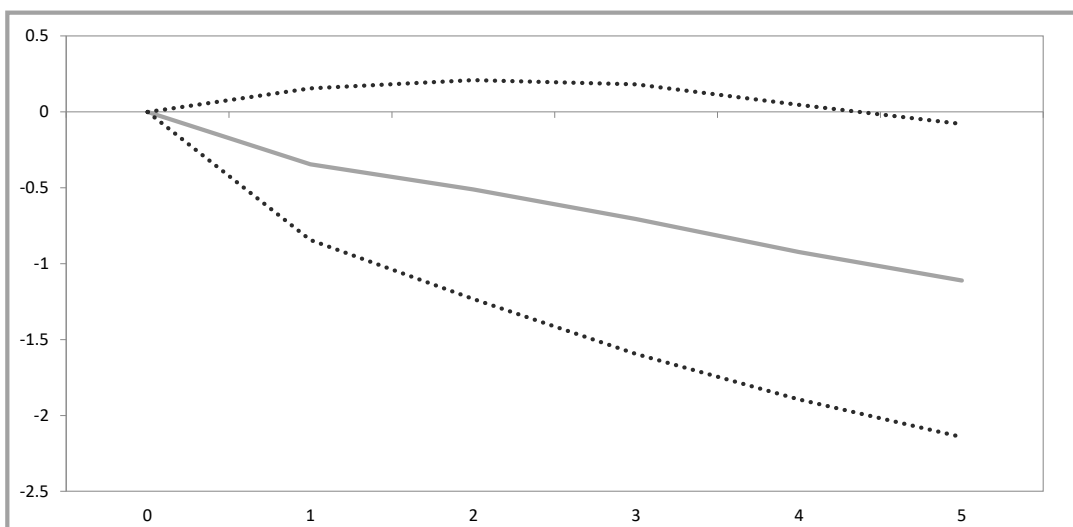
Panel 4. Labor share (ppt)—EOS >1



Note: Solid blue line denotes the differential effect of capital account liberalization episodes between a sector with a high external financial dependence/layoff rate/elasticity of substitution and a sector with a high external financial dependence/layoff rate/elasticity of substitution). Black lines denote baseline effects.

18

Less redistribution, even though needed more

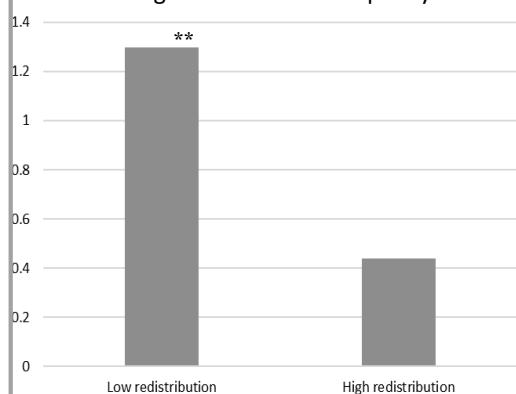


Note: redistribution = difference between market Gini and net Gini. Vertical axis measure percent change. Estimated impact on growth following a capital account liberalization episode. Liberalization is measured using the Chinn-Ito index. Estimates are based on an autoregressive distributed lag model. The horizontal scale is in years after the episode. See Furceri, Loungani and Ostry (2017) for details.

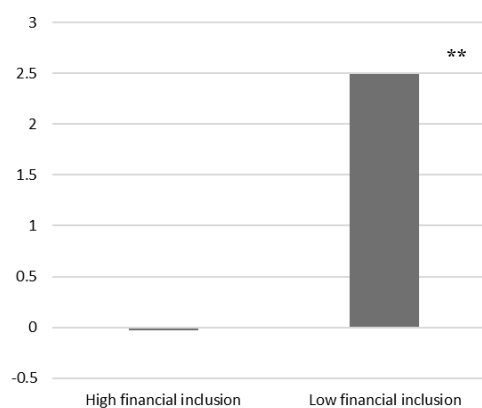
19

Sharing the benefits helps

1. Redistribution reduces the impact of financial globalization on inequality...



2. ...as does financial inclusion



Note: estimated impact on net Gini following a capital account liberalization episode. Liberalization is measured using the Chinn-Ito index. Estimates are based on an autoregressive distributed lag model. The horizontal scale is in years before or after the episode. The vertical scale shows percent change. ***, **, * denote significance at 1 percent, 5 percent and 10 percent, respectively. See Furceri, Loungani and Ostry (2017) for details.

20

THE BROAD MESSAGE...

- High inequality and low & fragile growth are two sides of the same coin--a dangerous gamble therefore to 'go for growth' and assume equity will take care of itself
- Fear of using fiscal redistribution is overblown. In fact, on average in the data, redistribution is a pro-growth policy through the greater equality it engenders. The 'leak' in Arthur Okun's bucket has not been large in practice
- Evidence on financial globalization
 - Costs in terms of increased volatility are high
 - Output benefits elusive and shared unevenly
 - Other effects: a race to the bottom on taxes? Reduced redistribution?
- Be cognizant of growth-equity tradeoffs in macro & structural policies
 - How can we design policies so growth benefits go up AND equity costs go down?
 - Use of complementary policies: "trampoline" policies--such as job retraining and assistance with search--to help workers bounce back from job displacement
 - Redistribution: greater reliance on wealth and property taxes, more progressive income taxation, and better targeting of social benefits
- On macro policies:
 - Case for paying down public debt is weak--living with debt is a better policy when fiscal space ample

Challenge for the Global Economy and a Better Globalization
Session 2 : Future of Work

HITACHI
Inspire the Next

Realization of “Society5.0” Society5.0: Aiming for a New Human-centered Society

25 May 2018

Mayumi FUKUYAMA

GM Technology Management Center, R&D Group, Hitachi, Ltd.

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1 Era of Uncertainty

HITACHI
Inspire the Next

Increased global connection of stakeholders with the rapid evolution of ICT
Rapidly increasing complexity of societal issues in this era of uncertainty

20th century

21th century

Era of predictability

Era of uncertainty

Science and Technology

Social Science

Mass production

System

Things and economic values

Ideas, service and social values

ICT
/AI

Streamlining &

Labor saving

measures



Business creation

Social structure

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1

2 Achieving a sustainable world

HITACHI
Inspire the Next

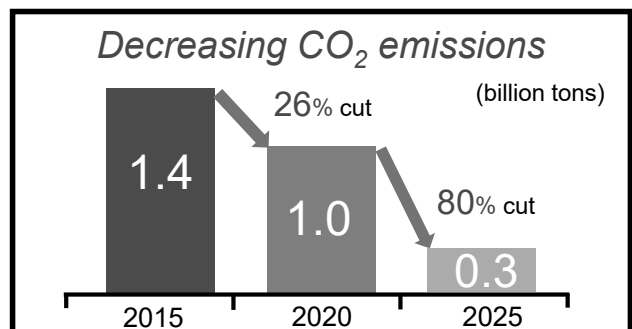
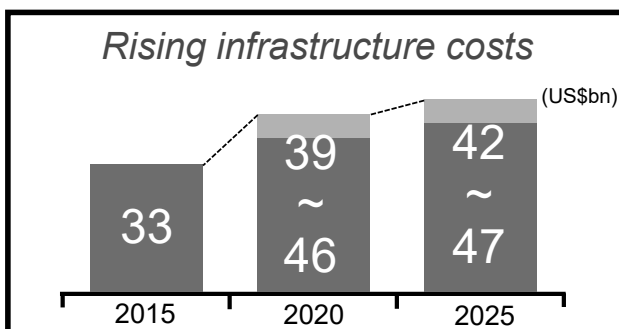
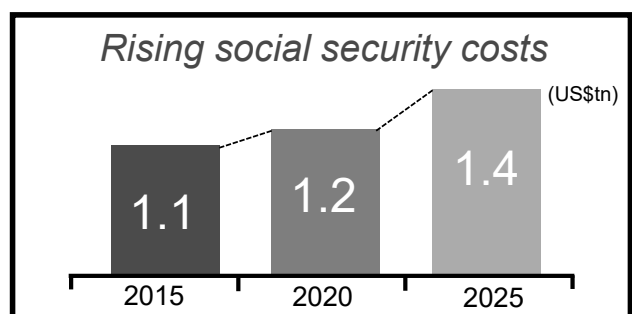
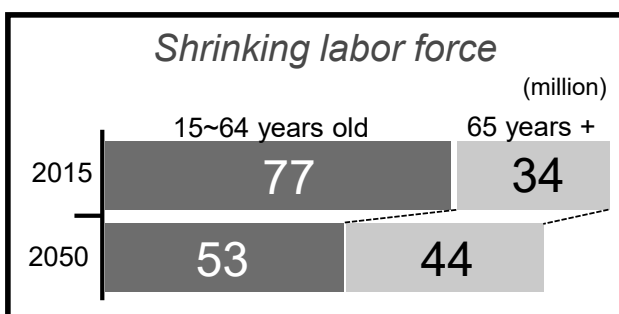


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3 Societal challenges facing Japan

HITACHI
Inspire the Next

An Advanced Country with Advanced Issues
Japan can contribute to resolving similar challenges worldwide

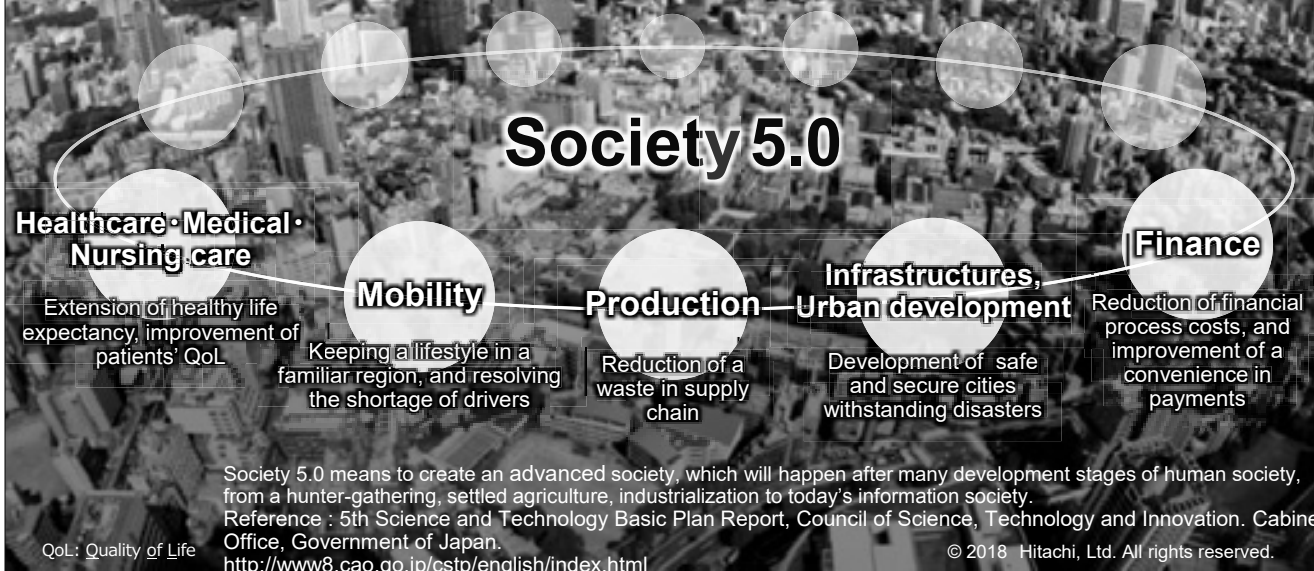


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4 Japan's challenges

HITACHI
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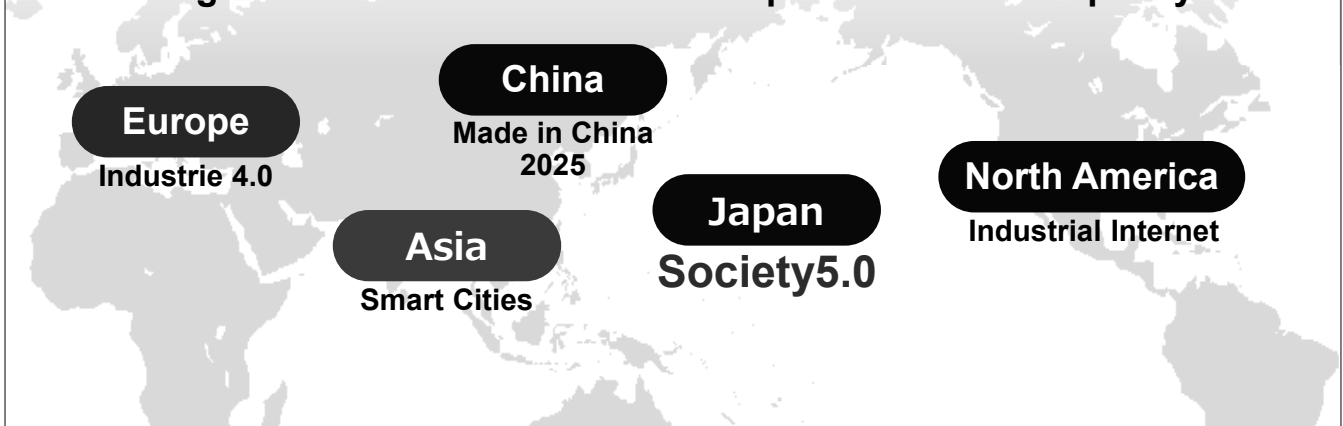
A sustainable and human centered society where everyone can live a life with vitality and in comfort



5 The evolution of digital transformation

HITACHI
Inspire the Next

The digitalization of industrial and social infrastructures is accelerating throughout the world
Digital Transformation becomes a pillar of industrial policy



IoT

Artificial intelligence

Robotics

Bigdata

Blockchain

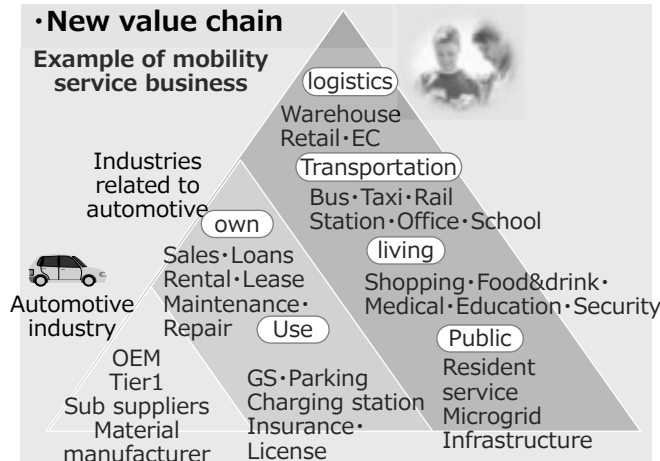
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6 What is happening : Industrial structure reform

HITACHI
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Structural reform from conventional systems in all industries

Industrial structure reform	Infrastructure Power supply equipment	Manufacturing Retail	Finance	Automotive	Medical equipment Pharmaceutical
Capital-intensive	Smart infrastructure	Personalize	Payment service	Mobility service	Healthcare service
Knowledge-intensive	•Energy solution •Omni channel •P2P Payment •Fintech •Shearing •Digital health •Wearable •Aggregator •Smart city •Smart manufacturing •Mobile payment •Autonomous drive				



•Direction of change

IoT Bigdata

Total solution

Cross industries

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7 What is happening : Positive and negative effects

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value creation

New business creation

Comfortable

human centered society

New service

Efficiency

Drastic change in conventional industry structure

Cybersecurity

Inequality

Unemployment

Data ownership

Privacy

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8 Human centric innovation : Invigorating the workplace: Raising organization happiness level & productivity

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From Hitachi's case

**AI automatically generates effective advice
that can raise the “happiness level” of employees,
using data obtained from wearable sensors**

*I want to
enjoy my
work*

An application to deliver
advice & visualize
“happiness” level

**Benefit confirmed in
field test with approx.
600 participants from
26 Hitachi Group sales &
marketing departments**

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9 Society5.0 : A revolution in human resource development

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Labor market

- Unemployment rate 2.8%
- Labor market participation rate 76 %
- Supply-demand mismatching in employment
- Shortage of IT personnel 37 million (2020) 79million (2030)

Depopulation Ageing society

- The number of people aged 15 to 64 shrink by 4.2 %
(2015 - 2020)

Half of the children born 10 years ago will live to 107 years old.
Revolution in human resources development
towards the 100-year life era is a vital part of
the society in which all citizens are **dynamically
engaged**, and such society can't be built
without the human resources development
revolution.



<https://www.kantei.go.jp/jp/headline/ichiokusoukatsuyaku/jjinsei100.html>

**A Revolution in Human Resource Development
Council for Designing 100-year society(Sep. 2017~)**

Council for Designing 100-year society(Sep. 2017~)

Reform for education

- **Education opportunity open to all people**
Reducing burden of education, Free education
- **Higher education**
Higher education reform for recurrent education
- **Diversification of hiring**
Employment of the elderly
- **Social security**
From focusing on the elderly to social security for all generations

Infrastructure development

● **Recurrent education**

Re-education
E-learning
Skill certification system
Education and training benefits

- **New Economic Policy Package Chapter 2(2017)**
- **Leasing policy package (2018)**

HITACHI
Inspire the Next

Delivering on the Paris Climate Goals through Accelerating Energy Transitions

*US-Japan Forum: Challenges for the Global Economy
and a Better Globalization*

Amar Bhattacharya
Brookings Institution

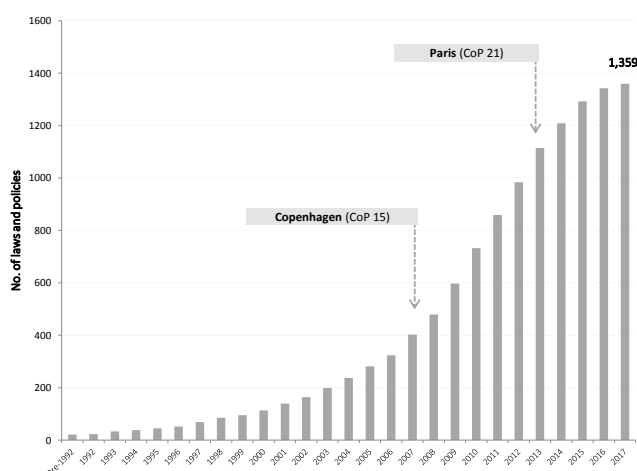
May 25, 2018



Structure

- The Paris Agreement
- The twin energy challenge:
 - Enhancing Access
 - Decarbonization
- Accelerating Energy Transitions:
 - Policy
 - Technology
 - Finance

Global action on climate change continues



Solar and wind are now some of the cheapest source of electricity in many countries, new RE plants are competitive with fossil fuels in most regions (IRENA, 2018)



Deployed energy storage reached 930 megawatts in 2016; year-on-year growth of over 50% for (non-hydro) storage (IEA, 2017)



EV car stock has reached 2 million units in circulation.



Powering Past Coal Alliance – 26 members, including 19 countries and 7 provinces/states from Canada (5 provinces) and the USA (2 states) pledged to phase out coal power.

More than 1,300 laws and policies in 164 countries representing 95% of global GHG emissions

3

The Paris Agreement

- Paris Agreement was a turning point and forms the basis of new, international, cooperative, long-term action on climate change—building on the broader commitment to the sustainable development goals embodied in the 2030 development agenda and financing for development in Addis in July 2015.
- Key pillars of the Paris Agreement:
 - Ambitious goals both to **hold the increase in global average temperatures to below 2 degrees and to achieve net zero emissions in the second half of this century**;
 - Continuously **review and update emission targets every five years**;
 - Call for countries to **indicate national commitments (NDCs) and their long-term strategies** for low-emission development by mid-century;
 - Enhancing **resilience through adaptation**;
 - **Mobilization of finance**.

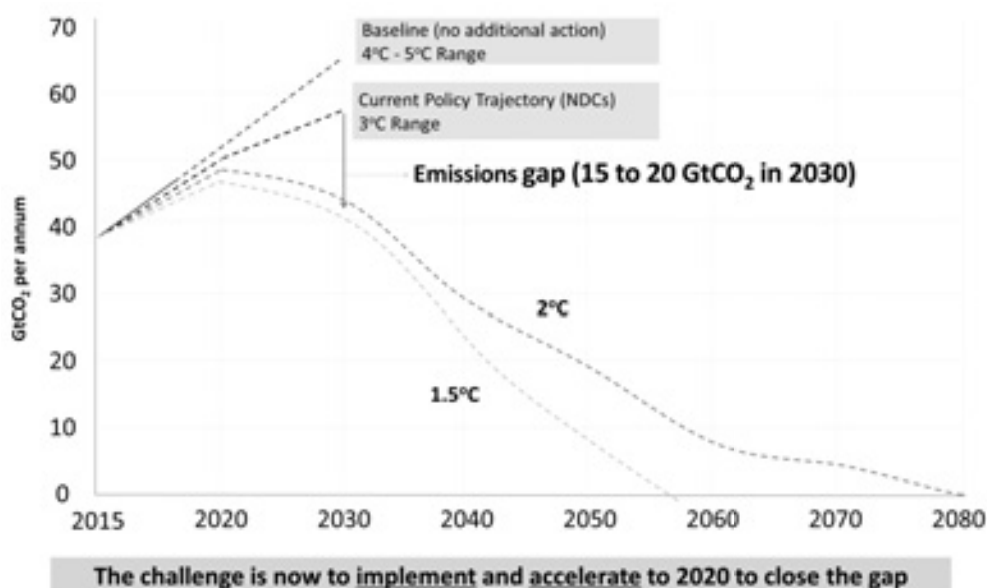
4

Drivers of the agreement in Paris; view shifted from the “costs of action” to “investment and growth”

- Paris was agreed based on the recognition that **growth, sustainable development, poverty reduction and climate action** are complementary and interwoven. **There is no “horse-race”**.
- The notion of “*costs of action*” is being **transformed** by rapid technological advances:
 - Efficiency, demand management; renewable energy (solar, wind) and energy storage technology.
- **Opportunity to:**
 - Boost shorter-run growth from increased investment in the low-carbon transition (sustainable infrastructure);
 - Spur innovation, creativity and growth in medium term;
 - Offers the only feasible longer-run growth on offer (high-carbon growth self destructs)
- Better understanding of dynamics of change and learning; and of the **consequences of dirty infrastructure** (e.g. air pollution from burning fossil fuels).

5

While action is happening there is still a large gap between current NDCs and what is required to reach the Paris temperature targets



4

What to do to hold warming “below 2°C”

- Can do a little more earlier and a little less later and vice versa but **shape of feasible paths similar**.
- Stabilising temperatures **requires stabilising concentrations, which will require net-zero emissions**. The lower the target temperature, the earlier the necessary achievement of net-zero; balancing sources and sinks.
- **Paths to achieve under 2°C likely to require:**
 - **zero total emissions** well before the end of century (2070 - 2080),
 - **Net negative emissions in major sectors** (because some sectors likely to be positive).
- Total current Paris pledges (NDCs) are for emissions of around 55-60 GtCO₂e per annum in 2030 (10% increase as compared to today). Whilst improvement on BAU (ca. 65-68 GtCO₂e per annum), need to be around **40 GtCO₂e or less per annum by 2030** (20% decrease).
- **Current NDCs (if met) point us to 3°C path, temperature not seen for around 3 million years. Holding temperature to below 2°C requires immediate and rapid action across whole world; focus on energy, cities and land.**

7

Further delay in action is dangerous

- The **window for making the right choices is uncomfortably narrow**. Remaining carbon budget is shrinking rapidly.
- **Further delay in action to learn more would be a profound mistake:**
 - The “**ratchet effect**” from flows of GHGs to concentrations (CO₂ hard to remove)
 - **Dangers of “locking in”** long-lived high-carbon capital/infrastructure. This involves **either** commitment to high emissions **or** early scrapping of capital/infrastructure.
 - Rapid urbanisation and building of infrastructure.
 - Potential devastating impacts on ecosystems, biodiversity, forests, water, air quality; tipping points.
- **Delay increases reliance** on unproven future technologies (e.g. negative emissions) or more ambitious action in future (politically feasible?).

8

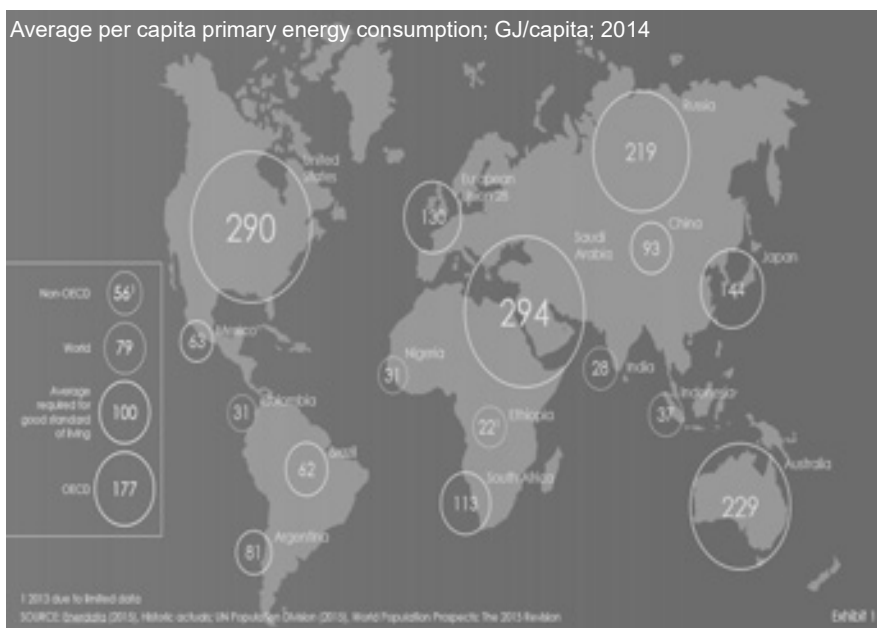
Structure

- The Paris Agreement
- The twin energy challenge:
 - Enhancing Access
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 - Finance

9

Challenge to low-carbon energy transition: Improving energy access

Average per capita primary energy consumption; GJ/capita; 2014



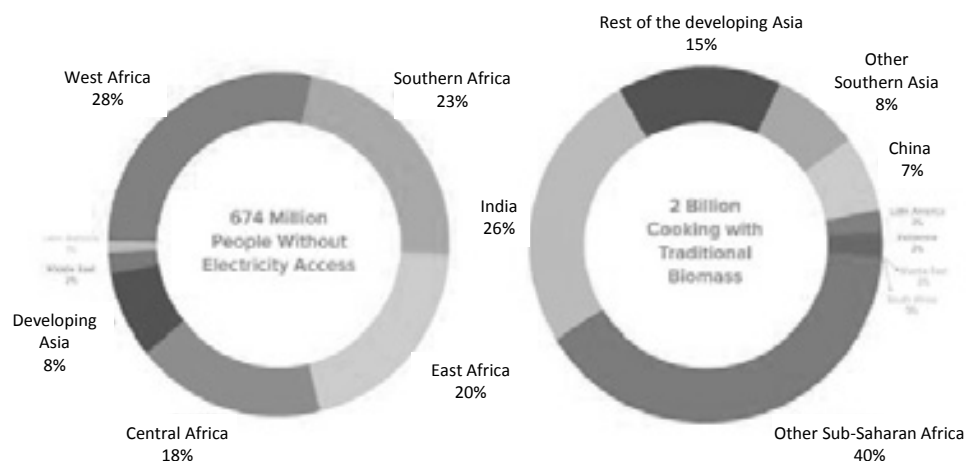
- Historically, about 100 GJ of primary energy per capita per year has been required to achieve energy access.
- By 2050, the world's population is expected to be 9-10 billion, all of whom deserve a good standard of living.
- Currently about 1 billion people still have little or no access to electricity and around 3 billion do not have access to clean cooking facilities, mostly in Africa and Asia (SE4all, 2016).
- The central question is: how can we create an energy-abundant future that supports development and keeps temperature rises "well below 2°C"?

Source: Energy Transitions Commission, 2016

5

Challenge to low-carbon energy transition: Improving energy access

2030 Gaps in access to electricity & clean cooking - planned and current policies

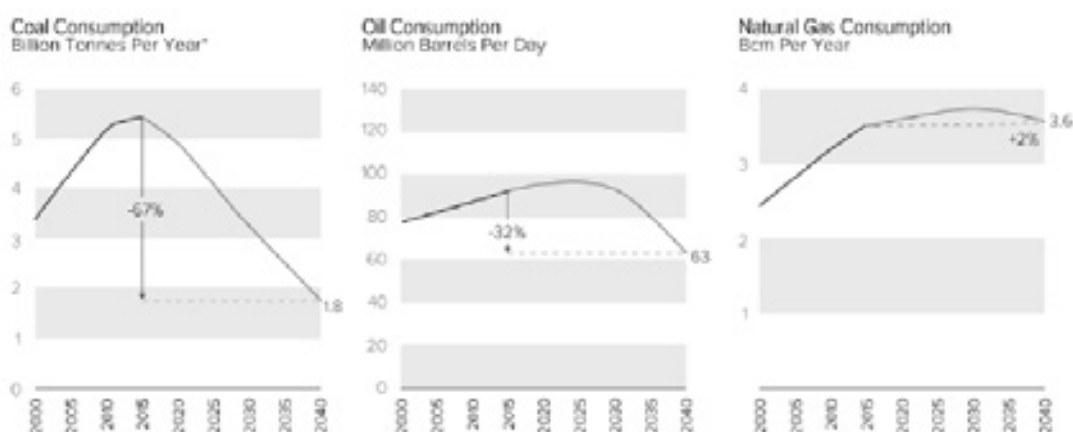


Source: IEA Energy Access: From Poverty to Prosperity, WEO Special Report, 2017

11

Challenge to low-carbon energy transition: Decarbonization

Fossil fuel consumption by 2040 in a 2°C scenario



Source: Copenhagen Economics for the Energy Transitions Commission, 2017. The Future of Fossil Fuels

6

Structure

- The Paris Agreement
- The twin energy challenge:
 - Enhancing Access
 - Decarbonization
- Accelerating Energy Transitions:
 - Policy
 - Technology
 - Finance

13

Accelerating Energy Transitions

- Even with radical improvements in **energy productivity**, global energy use will need to grow by around 80 percent to meet the needs of a global population likely to reach 9 billion by 2030.
- Limiting global mean temperatures to less than 2 degrees (with a probability of 66%) would require an energy transition of exceptional, scope, depth and speed. A **fundamental ramp up in low carbon technologies** is needed in all countries driven by improvements in energy and material efficiency and a fundamental reorientation of energy supply investments with much higher deployment of renewable energy.
- **The required transition will require progress along four dimensions:**
 - Decarbonization of power combined with extended electrification;
 - Decarbonization of activities which cannot be easily electrified;
 - Acceleration in the pace of energy productivity improvement; and
 - Optimization of fossil fuels use within the overall carbon budget constraints.

14

Opportunities for developing regions: Africa and South Asia

- Poor people are hit hardest by pollution and earliest by climate change. They often live in vulnerable places, have less resilience to shocks and are more exposed to deteriorating environments.
- Rapidly developing countries and cities offer the **opportunity to integrate RE and energy flexibility from the early stages**; design of network infrastructures (electricity, transport, water...)
 - Poor people benefit the most from ability to travel (e.g. public transport)
- To achieve SDG 7 (affordable and clean energy), the **current pace of electrification expansion must double**. Mostly needed in developing regions of Africa, Asia and Latin America.
 - To meet climate change goals, **almost all new electricity infrastructure must be clean and green starting now** (Pfeiffer et al., 2016)
- For many, **centralised grids are high costs and low access**. The falling costs of RE and improved reliability strengthen the case for a decentralised approach.
- Increases in RE use can not only support reaching 100 GJ of primary energy per capita per year, but also support environment, social and economic development.

15

Drivers of change: Policy

A well-designed carbon price is an indispensable part of a strategy for reducing emissions in an efficient way

Map of carbon pricing systems in place or planned worldwide



Source: World Bank Group, 2017. Carbon Pricing Dashboard.

- ETS implemented or scheduled for implementation
- Carbon Tax implemented or scheduled for implementation
- ETS or Carbon Tax under consideration
- ETS and Carbon Tax implemented or scheduled
- Carbon Tax implemented or scheduled, ETS under consideration

16

Drivers of change: Policy

At least 40 countries at least partially reduced subsidies for fossil energy between 2015-2017



Source: International Institute for Sustainable Development, 2017; based on data from IEA, World Energy Outlook 2016.

17

Drivers of change: Technology

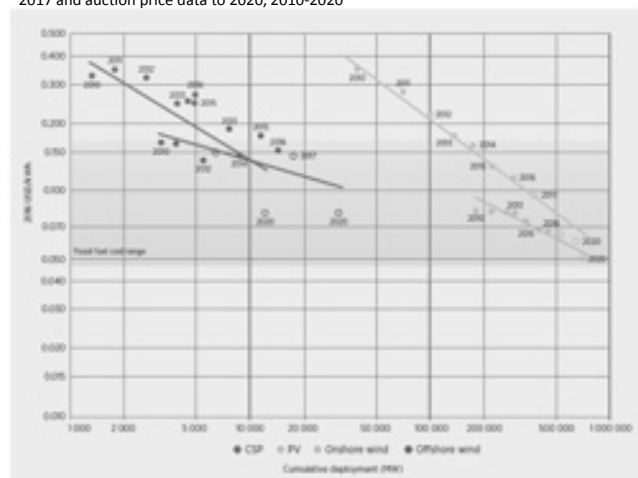
Renewable energy costs are now cheaper than fossil fuels in many countries

- Record lows for renewable energy are being achieved in many countries through auctions:

Country	Solar	Wind - Onshore
India	Rs 2.44 (2017)	Rs 2.43 (2017)
Mexico	US\$ 0.0197 (2017)	US\$ 0.0177 (2017)
Japan	US\$ 0.153 (2017)	
Germany	Euro 0.049 (2017)	Euro 0.038 (2017)
Chile	US\$ 0.0325 (2017)	

All prices per kWh (year record achieved)
Rs 65 to 1 USD

Global weighted average CSP, solar PV, onshore and offshore wind project LCOE data to 2017 and auction price data to 2020, 2010-2020

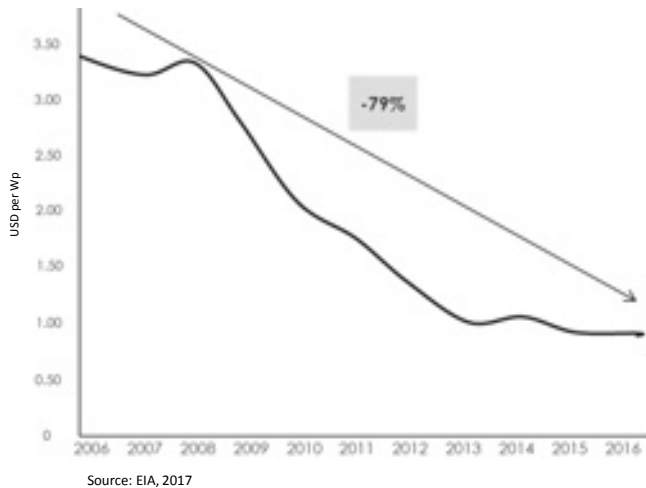


Source: IRENA, 2017

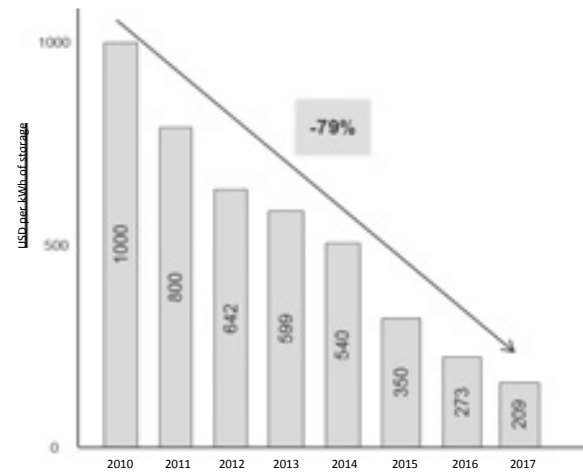
18

Drivers of change: Technology

Solar PV Module Prices



Observed Battery prices

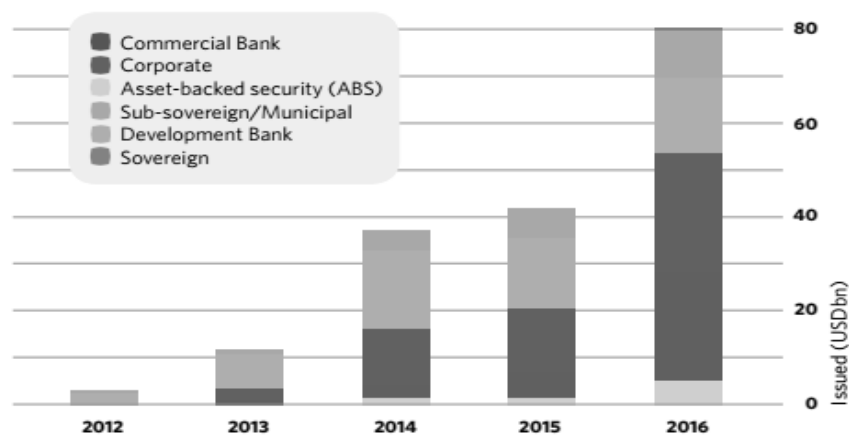


19

Drivers of change: Financing

The rapid growth of the green bond market shows the potential of green finance

The green bond market 2012-2016



Source: Climate Bonds Initiative

11

Drivers of change: Financing

*The recommendations of the **Task Force on Climate-related Financial Disclosures** should be considered for designing a policy and institutional framework for climate finance*



Source: Task Force on Climate-related Financial Disclosures

12

Financing: The key role of MDBs

- **Key role for MDBs** around supporting investment by enhancing the quality of the project, reducing risk and **crowding in private finance**.
- Their presence can impart **confidence**, **reduce risks** (particularly government-induced policy risk), bring relevant instruments for managing risks (equity, guarantees, long-term loans...) and encourage **participation of other sources of financing**.
- This can **bring down the cost of capital**: crucial for volume and sustainability (quantity and quality).
- They are **trusted conveners** that can help coordination and help establish replicable and scalable models.
- They play a crucial role in getting projects through **difficult early stages**. After that institutional investors can be attracted by stable long-term returns; great potential scale. Development banking can be profitable.
- A **major expansion of MDB financing will be needed** to support energy access and the acceleration of energy transitions.

22

Thank you!



8. 參考資料

Evaluation Report

1. Data and method

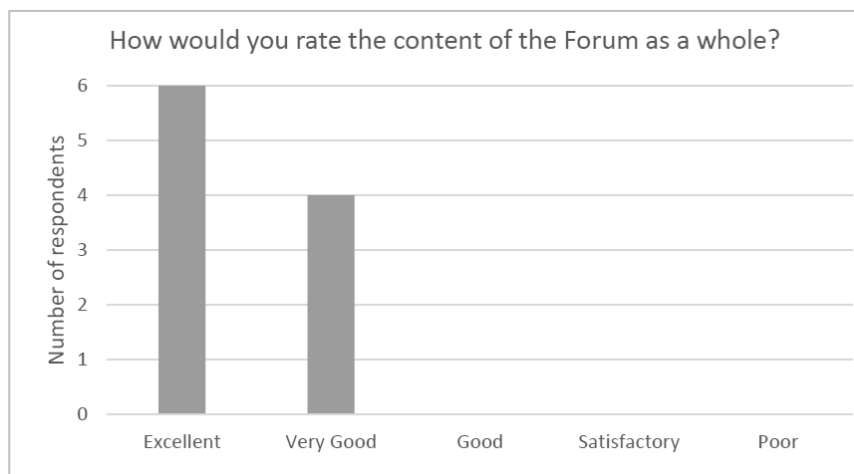
At the end of the event, each participant was requested to fill out a questionnaire. The questionnaire was consists of nine questions on participants' assessment of content, speakers, format, and organization of the event. Among 22 participants, 10 participants responded to the questionnaire. The responses were numbered and were analyzed as a whole.

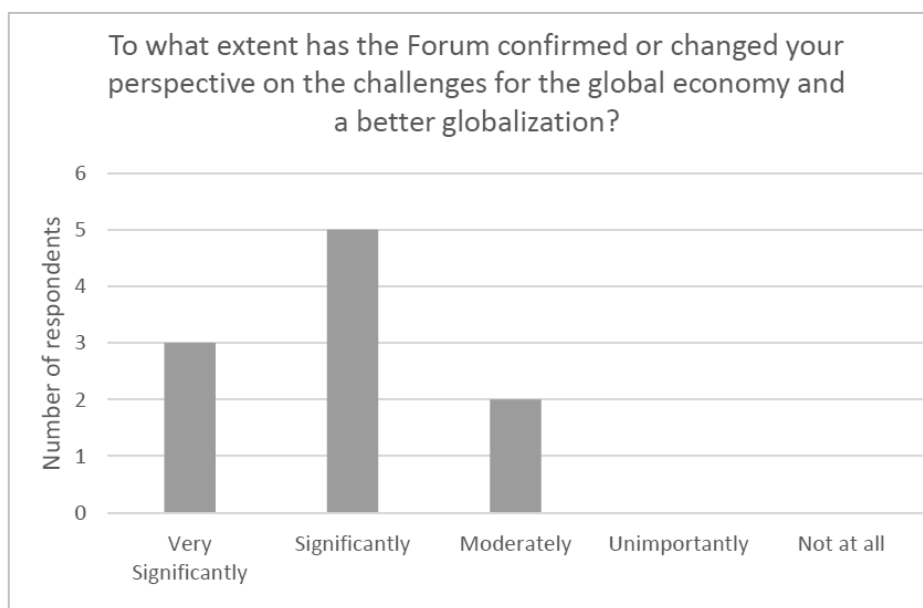
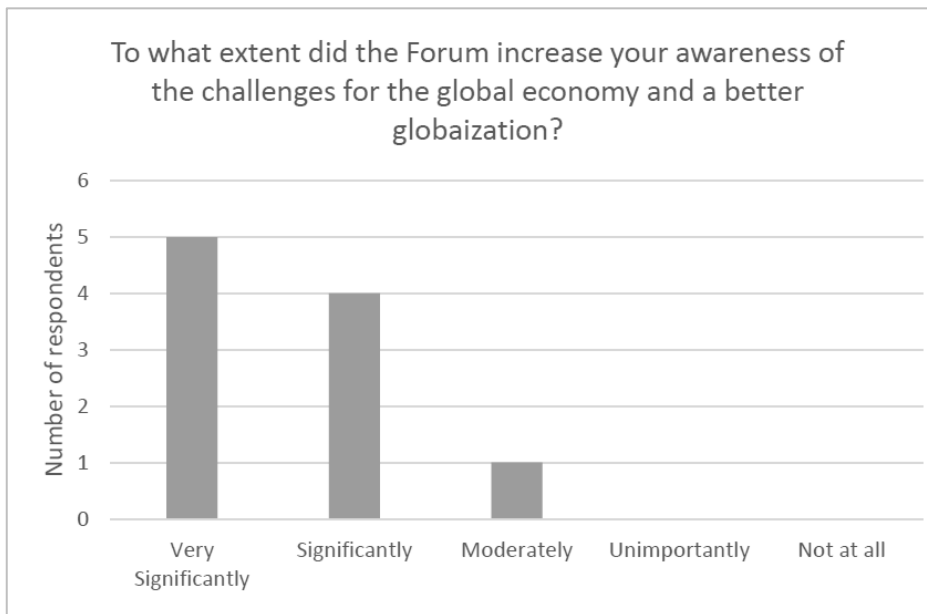
2. Result

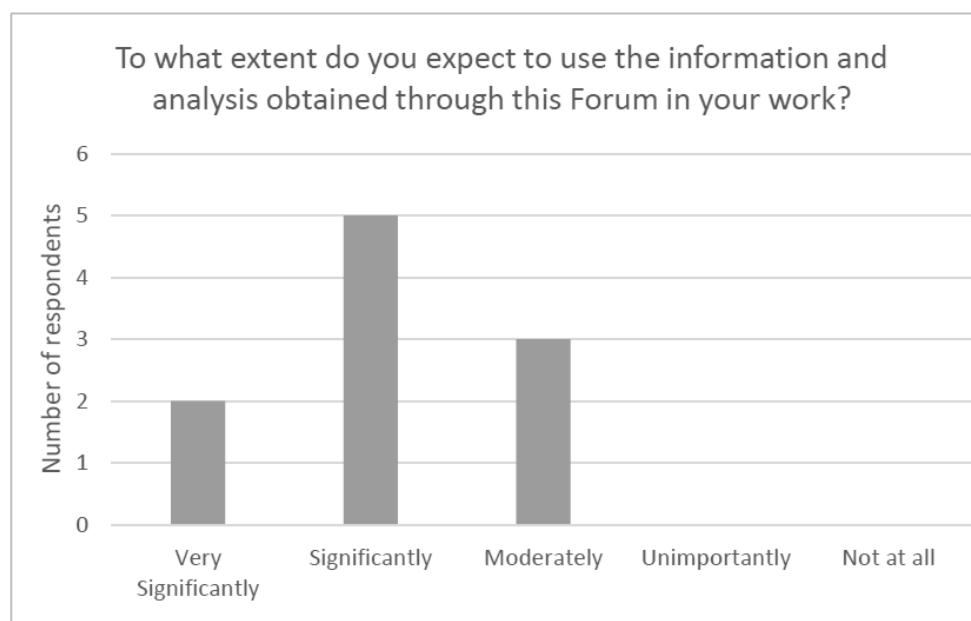
General assessment



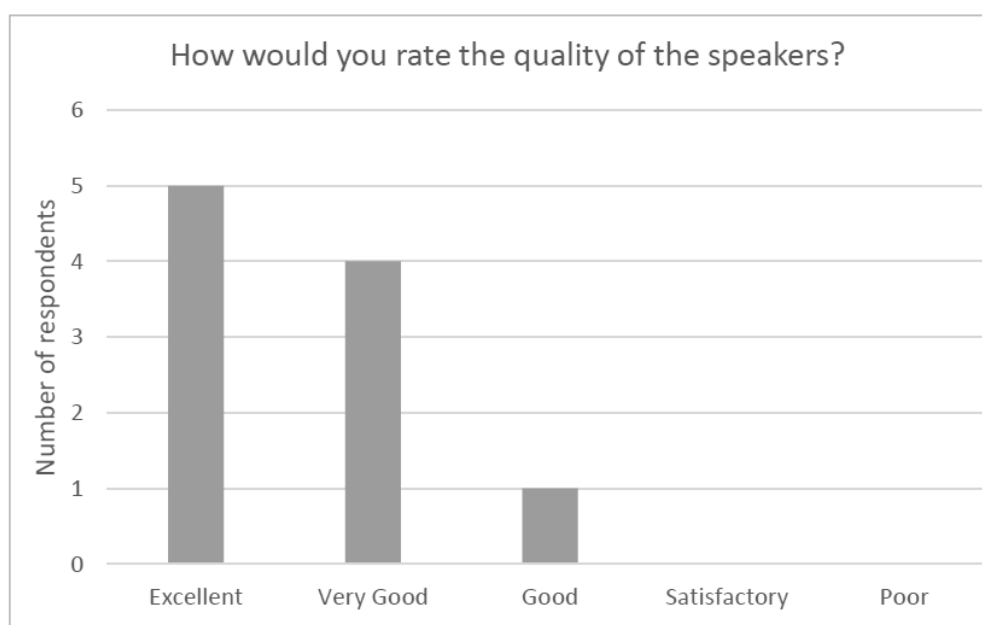
Content

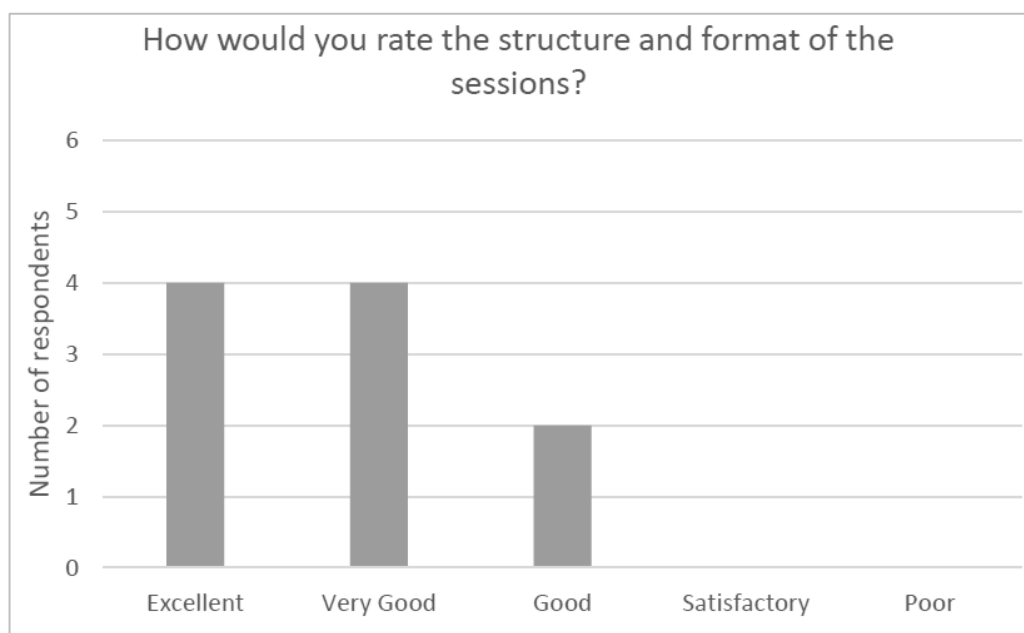
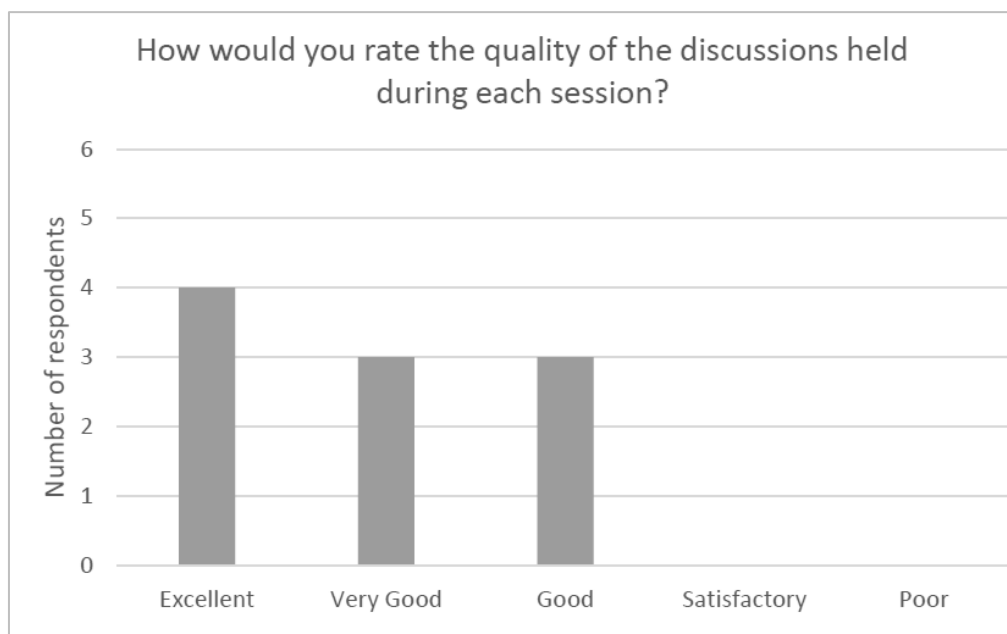


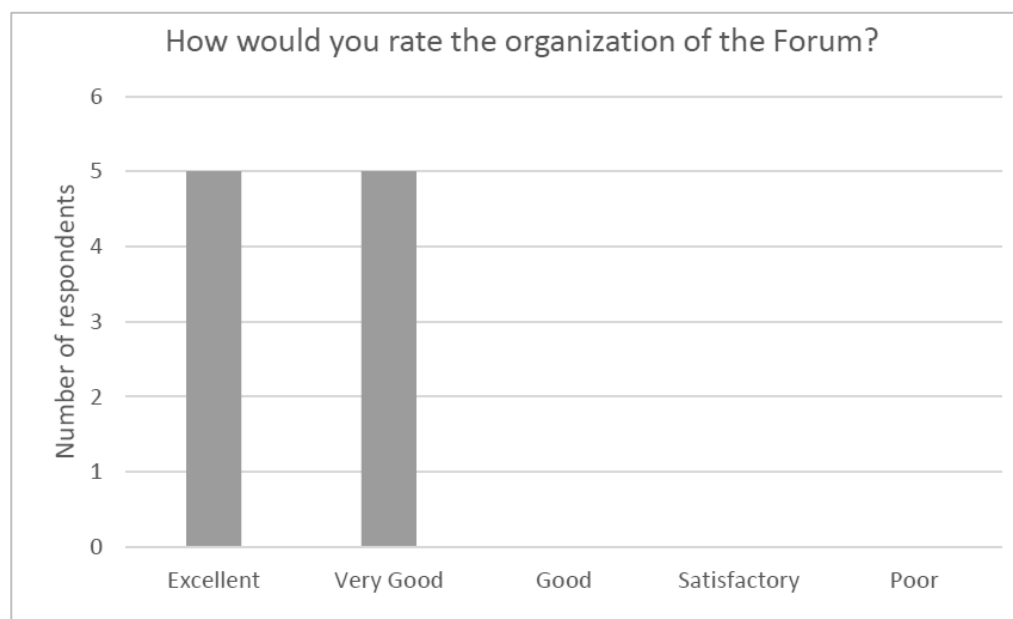




Speakers/Format/Organization







9. 成果

日米フォーラム 2018

活動と成果

<活動>

2018 年度の日米フォーラムは、5 月 25 日（金）米国最有力 Think-Tank の一つであるブルッキングス研究所(The Brookings Institution)との共催でワシントン DC の同研究所の会議室において実施された。

当財団は 1980 年代から欧州・アジア・米国において、それぞれが持続的発展を遂げ、ひいては世界経済の持続的発展に貢献するという観点で、それぞれが抱えている課題、成長抑制要因をとりあげ、それらの解決策の発見と解決策の実行に向けて、政治・経済など複合的な視点での意見・情報交換、相互の学びを志向している。米国では、1984 年から毎年実施しており、ブルッキングス研究所とは 2015 年の共催（同研究所のグローバル経済・開発プログラム・チーム）以来 2 回目である。2019 年には日本で G20 が開催されることになっており、今回のフォーラムはそれを意識して、G20 の創設に深く関与した同研究所と共催することにし、かつグローバルな課題を取り上げ、その問題点と解決策について議論することを狙いとした。

そして、“Challenges for the Global Economy and a Better Globalization”（世界経済とより良いグローバリゼーションへの課題）という大きなテーマの下に、「より良いグローバリゼーション」を目指すに際しての 3 つの課題を議論すべく、以下の 3 つのテーマ・セッションをもうけた。フォーラムの会合は、当財団日下会長及びブルッキングス研究所の Dr. Homi Kharas (Interim Vice President & Director, Global Economy and Development)による冒頭発言の後、以下の 3 つのセッションで JEF 派遣の日本側 3 名、ブルッキングス研究所アレンジの米国側 8 名のメインスピーカーが発表をおこない、合計 22 名の参加者（スピーカーを含み、途中参加、途中退席も含める）とともにラウンド・テーブル・ディスカッションを行った。Dr. Kharas は世界銀行勤務時代に middle-income trap（中所得国の罠）という概念を生み出したことでも知られている。

また、ランチョンスピーチとして、同研究所の上級フェロー（前副所長）の Dr. Kemal Darvis 氏が、世界が新しい局面に入っており、グローバリゼーションを困難にしている 5 つの要因を解説した。具体的な内容は、日本語版議事要旨を参照。同氏は、同研究所勤務以前にトルコの経済大臣、UNDP（United Nation Development Programme 国連開発計画）のトップを務めた。

Session 1: A Better Globalization（より良いグローバリゼーション）

日本側スピーカーは元外務審議官で NEC 顧問の小田部陽一氏。

Session 2: Future of Work（労働の未来）

日本側スピーカーは日立製作所研究開発グループ技術戦略室技術統括センター長兼 CIO の福山満由美氏。

当セッションのモデレーターを当財団原岡専務理事がつとめた。

Session 3: Energy and Climate（エネルギーと気候）

日本側のスピーカーは元外務大臣、環境大臣で武蔵野大学客員教授、同大学国際総合研究所フェローの川口順子氏。

当セッションのモデレーターを日下会長がつとめた。

セッション 1（より良いグローバリゼーション）では、

問題意識は、地球規模の成長回復を推進し、その成長と社会の広範な発展との再連動を促す必要があり、①生産性の減速という状況の中で、強固で、持続可能で均衡していて、かつ包摂的な成長をどのように予想しているのか？②国内の社会契約を更新し、拡大する格差に取り組むために必要な政策措置とは何か？③より良いグローバリゼーションを実践するために、多国間協力や多国間制度の信頼と信任を回復するにはどのようにすればよいか、である。これらを念頭にプレゼンテーションが行われ、議論がなされた。主な意見は以下の通り。

- ・世界経済の持続的成長に影響を与える要因としては、①生産性の向上、②格差の是正、③途上国の役割の拡大、④途上国の債務持続可能性などがある。

- ・生産性の向上は、デジタル技術の進展で今後達成されると見込まれる。技術は出現時には混乱を引き起こすが、結果として生産性向上に資する。

- ・格差については、技術や貿易に加えて金融グローバル化が拡大促進要因。これらに対応するため、職業訓練や求職支援など様々な補完的政策を検討する必要がある。

- ・開発途上国は、先進国以上に、世界的な変化による様々な影響に直面している。格差の拡大、雇用創出の不足、若年層の増大などである。多国間社会の果たす役割は多い。

- ・特に、途上国の開発資金の調達において、多国間開発銀行は資金動員に触媒的な役割を果たすべき。その際に、債務持続可能性について、留意して、その資金が果たして相応する収益を生み出すプロジェクトに投資されるのかを査定する必要がある。

セッション 2（労働の未来）では、

問題意識は、イノベーションとテクノロジーの発展を促進し、労働に及ぼす悪影響に対処し、格差の拡大を抑制する必要がある、①グローバリゼーション、技術革新、そして、雇用、賃金、格差の面での人口動態の推移とは、どのような意味を持つのか？②スキルと生涯教育とは、どのような意味を持つのか？③労働の性質が変わると開発途上国の発展への道筋にどのような影響があるのか？といったものである。これらを念頭にプレゼンテーションが行われ、議論がなされた。主な意見は以下の通り。

・世界中で産業・社会インフラのデジタル化が加速しており、デジタルトランスフォーメーションは多くの国の産業・経済の特徴となっている。日本政府は、労働力不足や社会保障費の上昇などの社会問題を解決しつつ、人間を中心に考える新しい社会「ソサイエティ 5.0」という概念を提唱した。この構想を背景に、日立グループはデータに基づき労働者の幸福度を向上させるデジタルシステムを開発した。

・情報技術にけん引される新しいグローバリゼーションの進展には、3つの要因が障害となっている。①国際取引、特に商品取引の伸びが停滞しており、大幅な加速は期待できない、②新しい貿易障壁が発生し、国際取引活性化の新たな歯止めと見込まれる、③生産活動の局地化が進展する。である。

・技術革新のメリットが開発途上国に行き渡るのは難しい。過去に比べれば技術の伝播スピードは速くなったものの、途上国の問題は、それらの利用率は低く、それらが生産活動に活用される機会は少ない。また、途上国の R&D への投資額が低い。更に、新たな技術に対応するには、それらに従事する人々のスキルを大幅に高度化させる必要があるが、もともと識字率が低く、質の高い教育係が少ないことを考えると短期間での対応は困難であり、これらは大きな課題である。

セッション 3（エネルギーと気候）では、

問題意識は、世界の気温上昇を摂氏 2 度未満に抑える削減目標期間の終了前に、エネルギーと気候問題への対策を実行する必要があるが、①世界的な気候変動対策の目標達成への見通しはどうか、また、目標に向かって進むために必要な行動とは何か？②急速に発展する技術を活用し、低炭素エネルギーシステムへの移行を促進するための方策とは何か？③国際的な機関からの政策支援や資金供給は如何にして各国による NDC（Nationally Determined Contribution 国が決定する貢献）の実施を加速させられたか？といったものである。これらを念頭にプレゼンテーションが行われ、議論がなされた。主な意見は以下の通り。

・米国トランプ政権は、CO₂ 排出削減を図る新政策は施行しないとしているが、非連邦レベルでは気候変動に関する取り組みは非常に活発になっている。全米の 2700 の地方自治体、州政府、企業が参加する「We Are Still In」と称する連合体が活動している。また、脱炭素化へのエネルギー転換が必要で、カーボンプライシングは非常に重要。

・低炭素エネルギーシステムの移行については、技術開発が予想以上に堅調に進み、経費削減も急速に進んでいる。また、移行の牽引策である、資金供給のグリーンファイナンスは 2013 年の 110 億ドルから 2018 年には 1500 億ドルを超えると見込まれる。

・エネルギーの移行を加速させ、国際金融機関と協力してパリ協定の施行を後押しできるのは G20 である。G20 は持続可能な成長戦略に結びつく気候変動対策に対するモチベーションを強化する、気候変動の緩和策と適応策の両方への投資のための十分な資金枠を確保する、という役割を果たすべきである。また、NDC の実行に必要な供給資金の査定も大事な役割である。

<成果>

以上の一日の会合での主な成果としては以下があげられる。

1. 当日は、日本側スピーカー3名、米国側スピーカー8名が3つのセッションの場で冒頭の発表を行い、オブザーバーとして在ワシントン DC の研究者等が議論に参加、合計 22 名の会合となった。活発で忌憚のない意見交換が行われ、非常に質の高い議論が出来た。(議事のポイントをブルッキングス研究所が英語で取りまとめており、この日本語訳と合わせて資料として添付している。)
2. 日本から参加していただいたスピーカーには、これらの場で、成長戦略、グローバル化、技術革新と経営、気候変動とエネルギー政策などについて日本の状況、立場や考え方を十分説明していただき、対日理解が進んだと思料される。また、米国側発表、コメントには日本が政策面で参考になるところも多かった。
3. 会合への参加者に対して、ブルッキングス研究所にお願いして、満足度のアンケート調査を行った。質問や回答の選択肢は同研究所主導で策定した(詳細な結果は P.87 を参照)。アンケートの回答は参加者の約半分にあたる 10 名から得た。その主な結果は、①会合全体の評価は、全員が positive であり、5 段階評価の最上位(Excellent)が最も多く 5 名、次(Very Good)が 4 名、そして 3 番目(Good)1 名と高い評価を得た、②スピーカーに対する評価も同様に高く、5 段階評価の最上位(Excellent)が最も多く 5 名、次(Very Good)が 4 名、そして 3 番目(Good)1 名であった。また、当フォーラム参加で「世界経済とより良きグローバル化への課題」についての認識がどの程度深まったか?との設問には、5 段階評価の最上位(Very Significantly)が最も多く 5 名、次(Significantly)が 4 名、そして 3 番目(Moderately)1 名との回答があり、フォーラムの有効性が高いことが示された。
4. 日本のスピーカーの方々に会議に関する満足度を伺ったところ、当財団のアンケート(満足度 4 段階方式)に対して、回答を寄せていただいた 2 名から高い満足の回答(全員最上位)を得た。他方で、具体的なコメントとして「テーマは適切であったが、ディスカッションに十分な時間がなかった」もあり、次回開催の留意点としたい。
5. また、日本側参加者に当財団事務局のロジの準備振りを評価していただいたところ、全員が最上位の満足であった。
6. これらの議論やランチョンスピーチのサマリーは、当財団のホームページおよびブルッキングス研究所のホームページ (<https://www.brookings.edu/events/us-japan-forum-challenges-for-the-global-economy-and-a-better-globalization/>) に掲載されており、実際にフォーラムに参加した方々に加えて、日米の多くの方に見ていただくことにより、波及効果が期待される。

10. 共催団体紹介



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11. 事務局

(日本側)

一般財団法人国際経済交流財団／Japan Economic Foundation (JEF)

住所： 〒104-0061 東京都中央区銀座 3-7-3 銀座オーミビル 5F

Tel： 03-6263-2511 Fax： 03-6263-2513

URL： <http://www.jef.or.jp>

担当： 業務部長 土屋 隆

業務部 木村 晶子

井上 真弓

〔業務運営委託先〕

株式会社 JTB コミュニケーションデザイン／JTB Communication Design

住所： 〒105-8335 東京都港区芝 3-23-1 セレスティン芝三井ビルディング 13 階

担当： ミーティング&コンベンション事業部 コーポレート営業 1 局 土屋 ゆり

(米国側)

ブルッキングス研究所／The Brookings Institution, Global Economy and Development Program

住所： 1775 Massachusetts Ave., NW Washington, DC 20036, USA

URL： <http://www.brookings.edu/>

担当： Minji Jeong

Post-Doctoral Fellow/Global Economy and Development

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一般財団法人 国際経済交流財団

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