

平成29年度 日米フォーラム(米国)

US-Japan Forum

“Economic Policy Challenges in the US and Japan”

報 告 書

2017 年 6 月 2 日(金)

(米国 スタンフォード大学 開催)

一般財団法人 国際経済交流財団

平成29年度日米フォーラム（米国） 2017年6月2日（金）（於：スタンフォード大学）



開会の辞 スタンフォード大学
APARC 日本プログラム・ディレクター 星教授



開会の辞 JEF 日下会長



セッション1 スピーカー 伊藤教授



セッション1 スピーカー 小林教授



セッション1 スピーカー
Bloom 氏、伊藤教授、小林教授、Shaw 氏



セッション2 モデレーター JEF 原岡専務理事



セッション2 スピーカー 岡田氏



セッション2 スピーカー
岡田氏、Fukuyama 氏、Delong 氏

平成29年度日米フォーラム（米国） 2017年6月2日（金）（於：スタンフォード大学）



セッション3 モデレーター Singleton 氏



セッション3 スピーカー 田中氏



セッション3 スピーカー
Bernstein 氏、Kushida 氏、田中氏、柳原氏



会場の様子



ディスカッションの様子



会場の様子



会場の様子



閉会の辞

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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等を取り上げ、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きた。

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。

今年度は、2017年6月2日（金）に、米国スタンフォード大学に於いてアジア - 太平洋研究センター（APARC）との共催でフォーラムを実施した。

今回のメインテーマ「日米の経済政策課題（Economic Policy Challenges in the US and Japan）」の下、日米が現在抱えている共通の以下の3つの課題に関し解決策、対応策が議論された。

－Session 1 「日米の成長戦略」

「Growth Strategies of the US and Japan」

－Session 2 「グローバル化と不平等」

「Globalization and Inequality」

－Session 3 「テクノロジーは解決策となるか？」

「Is Technology the Answer? (or Will Silicon Valley Save the World?)」

2. 開催概要

1. 開催日時： 2017年6月2日（金） 10:00 – 17:15

2. 開催場所： 米国 スタンフォード大学内 会議室
Bechtel Conference Center, Encina Hall, Stanford University
616 Serra St. Stanford, CA 94305-6055

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： スタンフォード大学 アジア太平洋リサーチセンター／
Stanford University, Asia Pacific Research Center (APARC)

4. テーマ：

“Economic Policy Challenges in the US and Japan”

（日米の経済政策課題）

Session 1 – Growth Strategies of the US and Japan

（日米の成長戦略）

Session 2 - Globalization and Inequality

（グローバル化と不平等）

Session 3 - Is Technology the Answer? (or Will Silicon Valley Save the World?)

（テクノロジーは解決策となるか？）

5. 出席者： 日米より 15名

<日本側>計6名

（氏名の五十音順／敬称略）

伊藤 隆敏 コロンビア大学国際関係・公共政策大学院 教授

岡田 秀一 石油資源開発株式会社 代表取締役社長

日下 一正 一般財団法人国際経済交流財団 会長

小林 慶一郎 慶應義塾大学 経済学部 教授

田中 正明 PwCインターナショナル シニアグローバルアドバイザー

原岡 直幸 一般財団法人国際経済交流財団 専務理事

＜米国側＞計9名

(氏名のアルファベット順／敬称略)

Shai Bernstein, Stanford Univeristy

Nick Bloom, Stanford Univeristy

Brad DeLong, University of California, Berkeley

Francis Fukuyama, Stanford University

Takeo Hoshi, Stanford Univeristy

Kenji Kushida, Stanford University

Kathryn Shaw, Stanford University

Ken Singleton, Stanford Univeristy

Tsunehiko Yanagihara, Mitsubishi Corporation

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

Economic Policy Challenges in the US and Japan

Japan Economic Foundation (JEF) – Asia Pacific Research Center (APARC)
Forum

Bechtel Conference Center, Encina Hall, Stanford University, June 2, 2017

Abenomics in Japan has entered its fifth year. Although it has not succeeded in getting Japan completely out of the stagnation of two decades, it seems to have stopped deflation (for now), closed the output gap, and started several structural reforms to restore the economic growth. In the U.S., the recovery from the global financial crisis of 2007-2009 has been painfully slow, although compared to many European countries, the U.S. economy has been doing much better. The gap between the rich and the poor, which was already a serious problem before the crisis, did not close and if anything grew wider after the crisis. Many blame globalization as the culprit for job losses, decline of middle-income class, and enhanced income inequality in the U.S., and there are signs of increasing domestic orientation in various aspects of the U.S. policy making. In the Presidential Election of 2016, the U.S. voters wished a change and elected Donald Trump. President Trump plans to restore the economic growth in the U.S. through new economic policy initiatives including economic deregulation, infrastructure investment, tougher trade negotiations with trade partners, tax policy to discourage imports and the US direct investment abroad, and policies to protect incumbent US companies and existing jobs for US citizens.

This US-Japan dialogue organized jointly by the Japan Economic Foundation (JEF) and the Japan Program of Asia Pacific Research Center at Stanford University examines important economic policy challenges that the US and Japan face. By the time of the dialogue, Donald Trump will have been the President for more than 150 days, and we will have a better idea about the economic policies of the Trump administration. Will those raise the US growth rate successfully? Will Abenomics eventually work? Or is it already dead as some critics claim? How much will the anti-globalization sentiment (continue to) influence the economic policies of advanced countries and how should the US and Japan respond? These are the questions that we will be asking in the dialogue.

The dialogue will take place at the center of Silicon Valley, which seems to lead the world economy by rapid pace of technological innovations. How much will these (and

future) new technology help growth of the advanced economies? Are we witnessing the new industrial revolution that is comparable to the one that happened 100 years ago? Or, as the techno-pessimists argue, are these new technologies mostly unrelated to economic growth? We will be asking these questions as well.

Each discussion starts with brief presentation (10 minutes) to set the stage for the discussion.

9:30-10:00 Registration and Coffee

10:00-10:15 Welcome Remarks

Kazumasa Kusaka (Japan Economic Foundation)

Takeo Hoshi (Stanford University)

10:15-12:00 Session 1: Growth Strategies of the US and Japan

Moderator: Takeo Hoshi (Stanford University)

Presenters: Nick Bloom (Stanford University)

Takatoshi Ito (Columbia University)

Keiichiro Kobayashi (Keio University)

Kathryn Shaw (Stanford University)

12:00-13:00 Lunch

13:00-14:45 Session 2: Globalization and Inequality

Moderator: Naoyuki Haraoka (Japan Economic Foundation)

Presenters: Brad DeLong (UC, Berkeley)

Francis Fukuyama (Stanford University)

Hideichi Okada (Japan Petroleum Exploration Co., Ltd)

14:45-15:15 Break

15:15-17:00 Session 3: Is Technology the Answer? (or Will Silicon Valley Save the World?)

Moderator: Ken Singleton (Stanford University)

Presenters: Shai Bernstein (Stanford University)

Kenji Kushida (Stanford University)

Masaaki Tanaka (PricewaterhouseCoopers International Limited)

Tsunehiko Yanagihara (Mitsubishi Corporation)

17:00-17:15 Closing Remarks

Kazumasa Kusaka (Japan Economic Foundation)

Takeo Hoshi (Stanford University)

17:15-18:00 Cocktail Reception

4. 出席者

登壇者含め 計32名
(氏名のアルファベット順)

Michael Armacost, Stanford University
Shai Bernstein, Stanford Univeristy
Nicholas Bloom, Stanford Univeristy
Richard Dasher, Stanford University
Brad DeLong, University of California, Berkeley
Karl Eikenberry, Stanford University
Francis Fukuyama, Stanford University
Naoyuki Haraoka, Japan Economic Foundation
Robert Hodrick, Stanford University
Takeo Hoshi, Stanford Univeristy
Gen Isayama, WiL
Takeshi Isayama
Takatoshi Ito, Columbia University
Shinnosuke Kameyama, NEDO
Eita Kitani, SV Branch
Keiichiro Kobayashi, Keio University
Kazumasa Kusaka, Japan Economic Foundation
Kenji Kushida, Stanford University
Yong Lee, Stanford University
Phillip Lipsky, Stanford University
Prashant Loyalka, Stanford University
Hideichi Okada, Japan Petroleum Exploration Co., Ltd
Kathryn Shaw, Stanford University
Hirokazu Shimoda, JETRO San Francisco
Ken Singleton, Stanford Univeristy
Daniel Sneider, Stanford University
Kathleen Stephens, Stanford University
Masaaki Tanaka, Pricewaterhouse Coopers International
Ryoichi Togashi, Komatsu
Yoshiaki Tojo, JETRO San Francisco
Tsunehiko Yanagihara, Mitsubishi Corporation
Yu Jin Woo, Stanford University

5. 略歴

(アルファベット順／敬称略)



Michael Armacost is the Shorenstein Distinguished Fellow at the Walter H. Shorenstein Asia-Pacific Research Center (Shorenstein APARC), Stanford University. In the interval between 1995 and 2002, Ambassador Armacost served as president of the Brookings Institution in Washington, DC. During a twenty-four-year government career, Ambassador Armacost served as Undersecretary of State for Political Affairs and as the U.S. Ambassador to Japan and the Philippines. Armacost graduated from Carleton College and earned his master's and doctorate in public law and government from Columbia University. He has received the President's Distinguished Service Award, the Defense Department's Distinguished Civilian Service Award, the Secretary of State's Distinguished Services Award, and the Japanese government's Grand Cordon of the Order of the Rising Sun. His recent book, *Ballots, Bullets, and Bargains: American Foreign Policy and Presidential Elections*, was published by Columbia University Press.



Shai Bernstein is an Associate Professor of Finance at the Stanford Graduate School of Business. He is also a Faculty Fellow at the National Bureau of Economic Research (NBER) and at the Stanford Institute for Economic Policy Research (SIEPR). His research interests lie at the intersection of corporate finance, entrepreneurship and innovation. He has a PhD from Harvard University, MA from Hebrew university and a BA from Ben Gurion University.



Nicholas (Nick) Bloom is the William Eberle Professor of Economics at Stanford University, a Senior Fellow of SIEPR, and the Co-Director of the Productivity, Innovation and Entrepreneurship program at the National Bureau of Economic Research. His research focuses on management practices and uncertainty. He previously worked at the UK Treasury and McKinsey & Company.

He is a Fellow of the American Academy of Arts and Sciences, and the recipient of the Alfred Sloan Fellowship, the Bernacer Prize, the European Investment Bank Prize, the Frisch Medal, the Kauffman Medal and a National Science Foundation Career Award. He has a BA from Cambridge, an MPhil from Oxford, and a PhD from University College London.



Richard Dasher has directed the US-Asia Technology Management Center in Stanford's School of Engineering since 1994. He concurrently served as Executive Director of Stanford's industry-funded Center for Integrated Systems from 1998 – 2015. He is on the International Advisory Committee for the Japan Science and Technology Agency (JST) and the Program Committee of the World Premier International Research Center initiative under MEXT. Dr. Dasher was the first-ever non-Japanese person asked to join the governance of a Japanese national university, serving on the board of directors and then the management council of Tohoku University, 2004 – 2010. He is also active as a consultant and advisor to business accelerators, startup companies, and VC firms in the U.S., China, Japan, and S. Korea. He travels to Japan several times each year and speaks and reads Japanese fluently.



Brad DeLong is a professor of economics at U.C. Berkeley, a research associate of the National Bureau of Economic Research, a blogger at the Washington Center for Equitable Growth, and a fellow of the Institute for New Economic Thinking. He received his B.A. and Ph.D. from Harvard University in 1982 and 1987. He joined UC Berkeley as an associate professor in 1993 and became a full professor in 1997.

Professor DeLong also served in the U.S. government as Deputy Assistant Secretary of the Treasury for Economic Policy from 1993 to 1995. He worked on the Clinton Administration's 1993 budget, on the Uruguay Round of the General Agreement on Tariffs and Trade, on the North American Free Trade Agreement, on macroeconomic policy, and on the unsuccessful health care reform effort.

Before joining the Treasury Department, Professor DeLong was Danziger Associate Professor in the Department of Economics at Harvard University. He has also been a John M. Olin Fellow at the National Bureau of Economic Research, an Assistant Professor of Economics at Boston University, and a Lecturer in the Department of Economics at M.I.T.



Karl Eikenberry is the Oksenberg-Rohlen Distinguished Fellow and Director of the U.S.-Asia Security Initiative at Shorenstein APARC, Stanford University. He is also an affiliate at the Freeman Spogli Institute's Center for Democracy, Development, and Rule of Law; the Center for International Security Cooperation; and the Europe Center. Prior to his arrival at Stanford, he served as the U.S. ambassador to Afghanistan from May 2009 until July 2011, where he led the civilian surge directed by President Obama to reverse insurgent momentum and set the conditions for transition to full Afghan sovereignty.

Ambassador Eikenberry also enjoyed a thirty-five-year career in the U. S. Army, retiring in April 2009 with the rank of Lieutenant General. He served as the Commander of the American-led Coalition forces in Afghanistan from 2005 to 2007. His other military operational posts included assignments as commander or staff officer with mechanized, light, airborne, and ranger infantry units in the continental United States, and also in Hawaii, Korea, Italy, and Afghanistan. Ambassador Eikenberry is a graduate of the U.S. Military Academy, holds MAs in East Asian studies from Harvard University and in political science from Stanford University, and was a National Security Fellow at the Harvard's John F. Kennedy School of Government.



Francis Fukuyama is the Olivier Nomellini Senior Fellow at the Freeman Spogli Institute for International Studies (FSI) and the Mosbacher Director of FSI's Center on Democracy, Development, and the Rule of Law (CDDRL). He is also a professor by courtesy in the Department of Political Science. He was previously at the Paul H. Nitze School of Advanced International Studies (SAIS) of Johns Hopkins University, where he was the Bernard L. Schwartz Professor of International Political Economy and director of SAIS' International Development program. Dr. Fukuyama has written widely on issues relating to questions concerning democratization and international political economy. His book, *The End of History and the Last Man*, was published by Free Press in 1992 and has appeared in over twenty foreign editions. His most recent book is *Political Order and Political Decay: From the Industrial Revolution to the Globalization of Democracy*. Francis Fukuyama received his B.A. from Cornell University in classics, and his Ph.D. from Harvard in Political Science. He was a member of the Political Science Department of the RAND Corporation, and a twice a member of the Policy Planning Staff of the US Department of State.



Naoyuki Haraoka is Executive Managing Director of Japan Economic Foundation. After graduating the University of Tokyo in 1978 (Bachelor of Economics), he joined MITI (Ministry of International Trade and Industry) of Japanese government. 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, 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. 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.



Robert Hodrick is Nomura Professor of International Finance at Graduate School of Business at Columbia University. His research examines theoretical, empirical, and econometric issues in asset pricing as related to equities, bonds, and currencies. He teaches international finance at the MBA and PhD levels and is the author (with Geert Bekaert) of a leading textbook, *International Financial Management*. He received his Ph.D. in

Economics from the University of Chicago in 1976, having received his A.B. in International Affairs from Princeton University in 1972. He previously taught at Carnegie-Mellon University from 1976-1983 and at the Kellogg Graduate School of Management of Northwestern University from 1983-1996. Professor Hodrick joined Columbia Business School in July 1996. From 1997 to 2002 he was the Academic Director of the School's Chazen Institute for International Business. From 2002 to 2004, Professor Hodrick served as the Senior Vice Dean of the Columbia Business School. He has been a Research Associate of the National Bureau of Economics since 1982.



Takeo Hoshi is Henri and Tomoye Takahashi Senior Fellow at the Freeman Spogli Institute for International Studies, Professor of Finance (by courtesy) at the Graduate School of Business, and Director of the Japan Program at the Walter H. Shorenstein Asia-Pacific Research Center, all at Stanford University. He received 2006 Enjoji Jiro Memorial Prize of Nihon Keizai Shimbun-sha, and 2005 Japan Economic Association Nakahara Prize. His

book *Corporate Financing and Governance in Japan: The Road to the Future* co-authored with Anil Kashyap received the Nikkei Award for the Best Economics Books in 2002. B.A., University of Tokyo (1983). Ph.D. (Economics), Massachusetts Institute of Technology (1988).

Gen Isayama has extensive experience in venture capital, finance, and entrepreneurship. He founded his first company, a web design consultancy, as a third year student at Tokyo University. Before he co-founded WiL, Gen was a partner at venture capital firm DCM, specializing in Internet media, mobile, and consumer services. Then, at the Industrial Bank of Japan, he led efforts across multiple disciplines, including corporate finance and market risk management. In addition to his work at WiL, Gen authors columns for the Technology section of the Nikkei Newspaper's digital edition and the Toyo Keizai Online, and monthly article on Nikkei Sangyo Shinbun. Furthermore, he is an active member of various METI, MEXT committees. He is also a popular speaker on venture and innovation. Gen holds a BA from the University of Tokyo's Faculty of Law and an MBA from Stanford Business School.



Takatoshi Ito is Professor at School of International and Public Affairs and Associate Director of Research at the Center on Japanese Economy and Business at Columbia University. He has taught extensively both in the United States and Japan since finishing his Ph.D. in economics at Harvard University in 1979. He taught as Assistant and tenured Associate Professor (1979-88) at the *University of Minnesota*, as Associate and full Professor at *Hitotsubashi University* (1988-2002), as Professor at the Graduate School of Economics at University of Tokyo (2004-2014) before assuming his current position in 2014. He served as a member of the *Prime Minister's Council on Economic and Fiscal Policy* (2006-2008). His research interest includes capital flows and currency crises, microstructures of the foreign exchange rates, and inflation targeting. He was awarded the National Medal with Purple Ribbon in June 2011 for his excellent academic achievement



Keiichiro Kobayashi is Professor at Faculty of Economics, Keio University, Research Director at Canon Institute for Global Studies (CIGS), and Faculty Fellow at Research Institute of Economy (RIETI). He received Ph.D. in economics from the University of Chicago in 1998. He researches macroeconomic theory. He currently works on theoretical models of financial crisis and monetary theory. He joined the Ministry of International Trade and Industry of Japan in 1991 after graduation from the University of Tokyo. From 2001, he was a fellow at RIETI and from 2010 to 2013 he had been a professor at Hitotsubashi University. He has joined Keio University in April 2013. He also has been Research Director at CIGS from 2009.



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.



Kenji Kushida is the Japan Program Research Associate at the Walter H. Shorenstein Asia-Pacific Research Center and an affiliated researcher at the Berkeley Roundtable on the International Economy. Kushida's research interests are in the fields of comparative politics, political economy, and information technology. He has four streams of academic research and publication: political economy issues surrounding information technology such as Cloud Computing; institutional and governance structures of Japan's Fukushima nuclear disaster; political strategies of foreign multinational corporations in Japan; and Japan's political economic transformation since the 1990s. Kushida has written two general audience books in Japanese, entitled *Biculturalism and the Japanese: Beyond English Linguistic Capabilities* (Chuko Shinsho, 2006) and *International Schools, an Introduction* (Fusosha, 2008). Kushida holds a PhD in political science from the University of California, Berkeley. He received his MA in East Asian studies and BAs in economics and East Asian studies, all from Stanford University.



Yong Suk Lee is the SK Center Fellow at the Freeman Spogli Institute for International Studies (FSI) and deputy director of the Korea Program at the Walter H. Shorenstein Asia-Pacific Research Center (APARC) at Stanford University. Lee's research intersects the fields of labor, international, and urban economics with focuses on entrepreneurship and firm growth, globalization and inequality, and economic sanctions. For example, his research examines the effect of university entrepreneurship initiatives on innovation, and the impact of entrepreneurship on urban economic growth. His research relating to globalization examines how inequality in South Korea evolved after the Asian Financial Crisis, how China's competition affects firm dynamics in Korea, and how economic sanctions effect the regional distribution of economic activity in North Korea. Prior to joining Stanford, Lee was an assistant professor of economics at Williams College in Massachusetts. He received his bachelor's degree and master's degree in architecture from Seoul National University, a master of public policy from Duke University, and a doctorate in economics from Brown University.



Phillip Lipsky is Assistant Professor of Political Science and Thomas Rohlen Center Fellow at the Shorenstein Asia Pacific Research Center at Stanford University. His fields of research include international and comparative political economy, international security, and the politics of East Asia, particularly Japan. Lipsky is author of *Renegotiating the World Order: Institutional Change in International Relations* (Cambridge University

Press), which examines how countries seek greater international influence by reforming or creating international organizations. His second book project examines the politics of energy and climate change. His research addresses a wide range of substantive topics such as international cooperation, the politics of energy, the politics of financial crises, the use of secrecy in international policy making, and Japanese politics. Lipsky obtained his PhD in political science at Harvard University. He received his MA in international policy studies and BA in economics and political science at Stanford University.



Prashant Loyalka is a Center Research Fellow at the Freeman Spogli Institute for International Studies and a Faculty Member of the Rural Education Action Program at Stanford University. His research focuses on examining/addressing inequalities in the education of youth and on understanding/improving the quality of education received by youth in large developing economies, including China, Russia and India. In the

course of addressing educational inequalities, Prashant examines the consequences of tracking, financial and informational constraints, and psychological factors of both students and teachers in highly competitive education systems. His work on understanding educational quality is built around research that assesses and compares student learning in higher education, high school and (the later stages of) compulsory schooling. He also evaluates programs/policies that seek to improve student outcomes. Prashant's research agenda is based on long-established and close collaborations with researchers at a number of universities in China, Russia's National University Higher School of Economics and Apple University. Before coming to Stanford, Prashant worked as an Assistant Professor in Peking University.



Hideichi Okada is President & CEO of Japan Petroleum Exploration Co., Ltd. Okada was Senior Executive Vice President in NEC Corporation responsible for its global business strategy (2014-2016). Prior to join private business, he served as Vice Minister for International Affairs, Ministry of Economy, Trade and Industry (METI), Government of Japan (2010-2012). In that capacity, he promoted international trade and investment, including

negotiations of major free trade agreements. He also worked for Prime Minister Junichiro

Koizumi as his Executive Assistant, where he dealt with policies on economy, industry, energy, science and technology, and environment, and with public relations (2001-2006). He was a Pacific Leadership Fellow at UC San Diego (March 2014) and the Sasakawa Peace Fellow at the Asia-Pacific Research Center, Stanford University (2013-2014). He was a Visiting Scholar at Harvard Law School (2007) and the School of International Relations and Pacific Studies, UC San Diego (2007) and Professor at National Graduate Institute for Policy Studies (GRIPS) (2006-2007). Okada was born in Tokyo in 1951. He received a LL.M. degree from Harvard Law School (1981), and graduated from the University of Tokyo with LL.Bs. (1975, 1976).



Kathryn Shaw is Ernest C. Arbuckle Professor of Economics at the Graduate School of Business, Stanford University. Professor Shaw currently studies managing talent in high-performance firms, entrepreneurship, and the value that good bosses confer on their firms and workers. She particularly focuses on how firms attract and build star talent. In addition, she on how the firm's choice of its human resource management practices can produce performance gains. She is identified as the co-developer of the field of "insider econometrics," a research field within economics in which researchers go within companies and use insider knowledge to empirically identify the performance gains from management practices. Her research has been extensively funded by the NSF, the Sloan Foundation, and the Russell Sage and Rockefeller Foundations. Previously, Shaw was a Member of President Clinton's Council of Economic Advisers (1999-2001) and was the Ford Distinguished Research Chair and Professor of Economics at the business school at Carnegie Mellon University. She completed her Ph.D. in economics at Harvard University in 1981. In 2008, she was elected a Fellow of the Society of Labor Economists; in 2001 Shaw received the Columbia University award for the best paper on international business. At Stanford, she teaches Organizational Strategy and Contemporary Economic Policy, and has won teaching awards.



Hirokazu Shimoda is an Executive Director at Japan External Trade Organization (JETRO) in San Francisco. He joined MITI (Ministry of International Trade and Industry) of Japanese Government in 1999. Since MITI was reorganized to METI (Ministry of Economy, Trade and Industry) in 2001, he had been posted in IT industrial policy section to promote big data businesses, IT device platforms, and cyber security measures for several years. He had also managed aircrafts and equipment of Japan Maritime Self-defense Force in Japan Defense Agency from 2004 to 2006. When the nuclear power plant accident occurred in Fukushima in 2011, he attended the Office of Corresponding to Nuclear Power

Plant Accident at Cabinet Secretariat. He made the standards of compensation for the accident suffers. Since he came back to METI, he made industrial frameworks to promote precision medicine and regenerative medicine. He had also been responsible for ensuring budget, planning new projects and managing human resources of the Commerce, Distribution and Industrial Safety Policy Group, and the Commerce and Information Policy Bureau at METI from 2014 to 2016.



Kenneth Singleton is the Adams Distinguished Professor of Management at the Graduate School of Business at Stanford University. He has published widely on financial risks and their impacts on economic decision-making, including books on credit risk and dynamic asset pricing. His professional awards include the Smith-Breeden Prize (Journal of Finance), Frisch Medal (Econometrica), and the Stephen A. Ross Prize in Financial Economics (Foundation for the Advancement of Research in Financial Economics), and he is a Fellow of the Econometric Society, the Journal of Econometrics, and the Society for Financial Econometrics. He is currently a scientific advisor to Credit Sesame, a startup helping individuals build wealth through informed management of their liabilities and credit; was a special advisor to the chief economist at the IMF during the crisis in 2009; and co-led the Fixed Income Research group of Goldman Sachs, Asia while on leave from Stanford in the early 1990's. He is President of the Board of the 501(c)3 nonprofit 1 Grain to 1000 Grains that leads programs for low-income communities through which families discover intuitive and actionable plans for more healthful eating and financial bandwidth. Ken holds a BA in Mathematics from Reed College and a PhD in Economics from the University of Wisconsin-Madison.



Daniel Sneider is the associate director for research at Shorenstein APARC at Stanford University. He currently directs the center's project on Nationalism and Regionalism and the Divided Memories and Reconciliation project, a comparative study of the formation of historical memory in East Asia. His own research focuses on current U.S. foreign and national security policy in Asia and on the foreign policy of Japan and Korea. Sneider was named a National Asia Research Fellow by the Woodrow Wilson International Center for Scholars and the National Bureau of Asian Research in 2010. Prior to coming to Stanford, Sneider was a long-time foreign correspondent. He also wrote widely on defense issues, including as a contributor and correspondent for Defense News, the national defense weekly. Sneider has a BA in East Asian history from Columbia University and an MPA from the John F. Kennedy School of Government at Harvard University.



Kathleen Stephens (USFS, retired) is an American diplomat. She was U.S. Ambassador to the Republic of Korea 2008-2011. She also was posted abroad in diplomatic assignments including U.S. Charge 'd Affaires to India (2014), and in China, Korea Yugoslavia, the United Kingdom, Portugal, and Trinidad and Tobago. Her Washington assignments included Acting Undersecretary of State for Public Diplomacy and Public Affairs (2012), Principal Deputy Assistant Secretary of State for East Asian and Pacific Affairs (2005-2007), Deputy Assistant Secretary of State for European and Eurasian Affairs (2003-2005), and National Security Council Director for European Affairs at the Clinton White House. Stephens is currently the William J. Perry Fellow for Korea at Stanford University's Shorenstein Asia Pacific Research Center.



Masaaki (Masa) Tanaka is Senior Global Advisor of PwC International and Vice Chair of the Board of Councilors of the U.S.-Japan Council. He has been serving on several Governmental Panels in Japan, including the Council of Experts on the Stewardship Code. On February 1st, 2017, He was appointed Advisor to the Financial Services Agency of Japan. Until June 2015, he was Director and Deputy President of Mitsubishi UFJ Financial Group, Inc. between 2011 and 2015, he served on the Board of Morgan Stanley. Mr. Tanaka joined the Mitsubishi Bank in 1977 and held a variety of positions such as Executive Officer and General Manager of the Corporate Planning Division, President and CEO of Union Bank, and Senior Managing Executive Officer and CEO for the Americas. Mr. Tanaka holds a law degree from the University of Tokyo and a Master of Laws Degree from the University of Michigan Law School.



Ryoichi (Ricky) Togashi is General Manager at Technology Innovation & Planning Agency, Office of the CTO, Komatsu Ltd. After joining Komatsu in 1993, 15+ years' experience in design and development of heavy equipment of mobile crushers and hybrid excavators. From 2012, engaged in open innovation promotion work, and after 2014, strengthen the activities due to the establishment of office of CTO. Spent about half of the year in Silicon Valley and gathering information on advanced technologies. As an outside committee activity, he serves as chairperson of "Research and development management committee" of Japan Research Industries and Industrial Technology Association. Togashi holds a Master of Engineering.



Tsunehiko Yanagihara is Executive Vice President at Mitsubishi Corporation (Americas) in Silicon Valley, running a cross-industrial, cross-company innovation hub called M-Lab. He has extensive international business experience, having spent more than 25 years in business management positions within the company. Mr. Yanagihara began his career with Mitsubishi Corporation in 1984 in the Machinery Group. In 1993, he moved to the Chemicals Group and became Managing Director of European Precision Molding B.V. in the Netherlands. He returned to Japan in 1999 and served as General Manager at the Life Sciences Business Unit and Bio-Fine Chemicals Unit. From 2010 to 2015, he worked in the Washington D.C. office as Senior Vice President and General Manager of Government Affairs. Most recently he served as General Manager at the Chemicals Group CEO Office of Mitsubishi Corporation. Mr. Yanagihara holds a MBA from Harvard Business School and a BA from Amherst College.



Yu Jin Woo is a Japan Program Research Scholar at the Shorenstein Asia-Pacific Research Center (APARC). Woo's research interests are in the fields of international and comparative political economy, particularly migration policies and citizenship laws. Woo holds a doctorate in political science from the University of Virginia. She received her first master's degree in international cooperation at Seoul National University and her second master's degree in political economy at New York University. She obtained her Bachelor of Arts in East Asian Studies at Smith College.

6. 議事要旨

(日本語)

以下のサマリーは、共催団体APARC側で作成した英文サマリーを当財団で仮訳したものである。

平成 29 年度 日米フォーラム

日米の経済政策課題

平成 29 年度の日米フォーラムは、2017 年 6 月 2 日、スタンフォード大学で開催された。最初にスタンフォード大学アジア太平洋研究センター (APARC) 日本プログラム・ディレクターの星岳雄教授、続いて国際経済交流財団 (JEF) 会長である日下一正氏がそれぞれ開会の辞を述べた。当フォーラムでは主に、1) 成長戦略、2) ポピュリズム、グローバル化、社会的公正、3) 技術革新という 3 つのテーマについて議論した。

セッション 1：日米の成長戦略

セッション 1 では、日本経済の現況についての概要が示された。日本の実体経済は良好に推移している。日本の 2017 年 1～3 月期では、経済成長率は 2.2% で期待潜在成長力を上回った。失業率は 2.8% となり、ほぼ完全雇用となった。名目賃金も 2% 増となった。生産年齢人口は毎年 1% ずつ減少してきたが、女性と高齢者の労働参加拡大が減少を補填している。特に注目されたのは、女性の就業比率が史上最高となり、米国のそれを上回るほどとなったことである。

しかし、日本経済には課題もいくつかある。第 1 に、インフレ率は依然としてゼロに近く、日本の量的・質的金融緩和 (QQE) 策が限界となっている可能性が示唆されている。第 2 に、日本の財政赤字は大きく、対 GDP 債務比率は 240% にものぼっている。一方で、名目賃金の上昇にもかかわらず、実質賃金は十分に上がっていないことが、国内消費低迷の一因となっている。第 3 に、人口動態の変化による、日本の継続的な労働力不足問題が挙げられる。

上記の課題への対応として、安倍首相の経済政策「アベノミクス」の「3 本の矢」の 3 本目、すなわち生産性向上および賃金上昇のための成長戦略が提示された。構造改革を要するいくつかの重要分野が示された。第 1 に、日本は教育と労働改革により、就労者の国際競争力を高める必要がある。特に必要なのは、就労者の英語および IT の運用技能向上ならびにより柔軟な雇用・解雇制度の導入である。第 2 に、資本配分を最適化するために、日本は資本市場改革に

より企業統治および年金基金管理を改善しなければならない。第3に、国際取引を推進するために、日本は国内市場を拡大開放する必要がある。とりわけ、コメや乳製品製造業などの農業部門が該当する。最後に、医療品質を下げずに日本人の医療費を低減するための医療事業改革も必要である。

債務というテーマに沿い、日本の債務問題史を振り返った後、官民の過剰債務がいかに継続的な景気停滞を起こすかというモデルが提示された。1980年代、高度成長期の日本の債務問題は、資産バブルという形をとった。1990年代初頭のバブル経済崩壊後、日本経済は不良債権に悩まされた。2000年代初頭に不良債権問題が解決し始めて以降、日本の公的債務は増大し、2010年代に急増した。過剰債務が慢性的に景気を下押ししうるという新たなモデルが策定され、日米経済データと比較したシミュレーション結果が示された。

このモデルには経済成長のためのいくつかの政策的含意がある。1990年代の日本のように、民間債務が継続的な景気停滞を引き起こす可能性があるという理由で、目指すべき方向が債務低減となる場合もある。特に、企業債務または家計債務にとっては、銀行の資本増強、不良債権の償却、債務者の債務免除および債務再編が有用となり得る。他方で、公的債務も継続的な景気停滞を引き起こす可能性があり、これには、財政再建が打開策となる。とはいえ、財政再建は本質的に複数世代にまたがる投資であるため、今日の政策立案者は意欲的に財政再建を実施しない可能性がある。つまり、現世代がコストすなわちより高い税金を支払っても、見返りすなわち経済的安定を享受するのは次世代なのである。そこで、政治改革を実施し、次世代の利益を代表する独立財政機関を創設する必要がある。

「アベノミクス」の「3本の矢」の3本目は生産性向上を目指しているが、その新たな分野がマネジメントの実践（プラクティス）である。世界経営調査（World Management Survey）のデータセットから重要情報が提供されている。同調査は、2万以上の企業を対象に30人構成の調査チームにより2002年から3年ごとに実施されている。調査方法には、3つの重要要素がある。第1に調査者は、18の経営手法についての採点表を策定した。採点表には、業績追跡記録、ターゲティング、昇進制度などの項目が含まれる。これらの情報は、プラント責任者への45分間の電話聞き取り調査により収集する。第2に、企業がインタビューに応じやすくするために、この調査は財務状況の詳細は対象にしない「リーン生産方式」へのインタビューとして始められた。ちなみにこの調査は、ドイツ連邦銀行、インド準備銀行、世界銀行などの公認を得ている。第3に、この調査は公平で比較できる回答を得るために「二重盲検法」をとっている。すなわちインタビューは企業業績の情報を事前に得ず、インタビューされるマネージャも採点されることを事前に知らされない。

この調査結果から、マネジメント・プラクティスが経済動向に及ぼす影響が明らかになった。総じて、多くの企業や国々の中でマネジメント・プラクティスが幅広く普及していることが明らかになった。さらに、マネジメントの評価点は、生産性、収益、生産量の増大、輸出量、従

業員 1 人当たり研究開発費、従業員 1 人当たり特許数などの企業業績の評価基準と確実に関連している。因果関係の有無を確認するために、調査者は無作為抽出試験を実施し、平均してマネジメント・プラクティスは全要素生産性の 31.4%に相当することが明らかになった。しかし日本ではマネジメント・プラクティスは全要素生産性の 8.82%にすぎず、他の OECD 加盟国に比べ非常に低い。

この調査にも政策的含意がある。まず、多国籍企業はその拠点にかかわらず優れたマネジメント・プラクティスをもたらすため、海外直接投資受入れは奨励されるべきである。次に、家族経営企業や国有企業はマネジメントがずさんなことが明らかになったため、経営の専門家による会社所有、経営を推進することが有用となりうる。第 3 に、高等教育はより優れたマネジメントをもたらすと見られるため、非経営者と経営者ともにその教育水準を上げることである。最後に、規制の増加とマネジメント・プラクティスの効率低下には相関関係があるため、規制緩和も有用となりうる。特に、多国籍企業の誘致と規制緩和は日本には有用であり、教育改善と規制緩和は米国が検討すべき要素であると示唆された。

セッション 1 は、日米成長戦略の比較分析で締めくくられた。成長戦略が重要である理由は、多くの問題の中で、特に債務および所得格差という問題の解決に資するためである。たとえばラジ・チェティー氏はその研究で、経済成長が減速すると、子が経済的に親を越える能力は著しく低下すると示している。

次に、世界各国の成長を比較する概説が示された。まず、1 人当たりで見ると、中国やインドなどの経済大国に大差をつけて、依然として日米が最富裕国であることが強調された。にもかかわらず、先進国による世界総生産への貢献は実のところ先細りし続けている。世界総生産への貢献を縮小させているのは主に欧州で、日本の貢献度はほぼ横ばいのままである。

他国の成長が日米を追い上げている理由はいくつかある。1 つには、先進国の労働者の質と生産人口は成長を維持するためには不十分である。他国は教育水準で後れをとるのみでなく、平均して仕事量が少ない。その上、日米の大企業の大半は優れたマネジメント・プラクティスをすでに採用し、生産性が著しく高まっているため、今日、成長の余地はもはや残っていない。他方で、アジア諸国は資本、労働力、テクノロジーに多額を投資しており、急速に成長し、先進国の既存の仕組みを活用できるため有利な立場にいる。

セッション 1 は、未来への道筋を示すことで締めくくられた。革新への 3 つの見通しが示された。1) すべての革新は過去のものという悲観的な見通し、2) テクノロジーが鍵となるという前向きな見通し、そして、3) 知識の普及という古典的な見通しである。特に注目されたのは、人口動態と起業家精神の関係についてである。若年層が多い国の方が、そうではない国より起業機会は多いようである。おそらく、若年層が高齢者より創造力が豊かで、大企業では十分な機会を与えられていないからと思われる。最後に、トランプ政権の政策パッケージについ

での議論があった。トランプ政権の政治課題の中核は、減税、赤字削減、特定分野の規制緩和である。しかしトランプ大統領は、投資、貿易、法の支配、グッドガバナンス、そして特に移民など、多くの重要課題について政策を十分に実行していない。

質疑応答時には、出席者は日米での労働や資本の生産性をいかに向上させるかという重要問題について議論した。たとえば、日本で構造改革が遅い理由についての質問へは、スピーカーの1人は、日本の政治制度がこれまでいかに改革に不都合なものだったかを述べた。他のスピーカーは、低金利により日本人の「変化しようとする」創造力がいかに阻害されてきたかを指摘した。さらに人口動態と革新にかかわる議論も進められた。労働力として高齢者に職場復帰してもらうことが重要視された。またオートメーションの影響についても議論された。テクノロジーの進歩があるにもかかわらず労働生産性は低いままという懐疑的な見方が強まっている。最後に、大企業は起業家精神をそぐ要因の1つでありうるため、中小企業の業績向上を支援する必要性が指摘された。

セッション2：グローバル化と不平等

セッション2ではまず、さまざまな観点から不平等の定義が議論された。経済学者は、不平等とは、功利主義的アプローチから見ると厚生が損失している状態であり、これは問題であるとする。一般の人々は、不平等とは自分が受けてしかるべき物事を自分が得られない場合、あるいは、分不相応な人間に物事が与えられる場合のことと考えている。この観点から緊張関係が生じる。地理的、時間的に不平等を測定することが難しい理由もこの観点によるものである。たとえば、ブリタニカ百科事典はかつて2,000ドルで購入するものであったが、現在はだれもがWikipediaを無料で閲覧できる。この変化はいかなる経済統計にも記録されていない。世界人口問題では、1976年以降コンバージェンス（収束）傾向が続いてきたが、それは、中国とインドがそれまでの遅れを解消しているために過ぎない。

グローバル化の時代における不平等の原因についても議論が進められた。米国での製造業被雇用者の減少にはいくつかの原因が考えられる。米国ではテクノロジー進展に見合った教育水準向上の失敗で、製造業被雇用者の対全被雇用者数比率は30%から12%に減少した。さらにはレーガン政権とブッシュ政権期の財政失策により、12%から9%にまで減少した。次に「中国危機」により9%から8.7%に減り、北米自由貿易協定（NAFTA）の発効により8.7%から8.6%にまで減少した。つまり、教育とテクノロジーが不平等の真の原因であり、グローバル化はスケープゴートに過ぎない。

経験的記述に従い、グローバル化および不平等の社会的、政治的含意について議論された。日米間および、日米と他のOECD加盟国間の、2つの相違について言及があった。1つは、米国の貧困は、民族性および政党に結びついている。たとえば、南部の白人男性はオバマケアの

最大の受益層であるが、自らの利益に反し、人種・民族的マイノリティに賛成票を投じた。さらには、貧困だけが不平等の促進要因となるわけではない。現況にもっとも不満を感じているのは、最貧層の人々ではなく、自分たちの地位を失った、最下位から二番目の下層市民である。2つ目は、米国の不平等は性別で異なっている。米国の公式失業率は4.4%だが、男性の就労率は上昇していない。

上記の問題は、いくつかの結果をもたらす。社会的には、男性の就労率の低下は家庭に深刻な悪影響を与える。現在、白人の10代の大多数がシングルマザーと暮らしている。過去10年間、労働者階級の男性の薬物乱用は増加し、寿命は短縮している。この変化にはさらなる政治的含意がある。民主党は、過去には労働者階級の有権者を頼りとしていたが、現在は支援者を共和党に取られてしまっている。そして、自己のアイデンティティーが行動に影響する。たとえば、移民などの問題に対する有権者の態度に影響を及ぼすのは絶対的貧困ではなく、むしろ不公平感である。

最後に、世界中のさまざまなポピュリズムについての議論もあった。ポピュリズムは地域により異なる形態をとるため、必ずしもグローバル化の問題とはなっていないと論じられた。特にアジアでは、2つの要因によりポピュリズムはそれほど問題とはなっていない。1つには、アジアには大規模な移民問題がないためである。2つ目には、中国の習近平国家主席や日本の安倍首相のように、アジアのリーダーはアイデンティティーが政情を不安定化させる要因とならないような方法でナショナリズムの高揚に奏功しているからである。

グローバル化については、産業面からさらに深い洞察が得られた。まず、グローバル化時代の製造部門およびサービス部門の概要が提示された。たとえば、iPhone 6やボーイング787型機のサプライヤーマップから、グローバル化が現在のサプライチェーンに広く普及し、深く浸透していることが明確に示された。同様に、マクドナルドなどのファストフードチェーン、H&Mなどのファストファッション・ブランド、UberやAirbnbなどのITサービスプロバイダーもグローバル化のスケールの大きさを示している。

自由貿易協定（FTA）および地域協力の現況についても言及された。2016年12月現在施行されているFTAは286件、調印済みだが未批准のFTAは18件、交渉中は79件、準備段階は22件である。特に注目されたのは、環太平洋戦略的経済連携協定（TPP）から米国が離脱したが、米国を除く11か国は、米国が復帰する余地を残したまま協定発効に向けた検討を開始したことである。

最後に、グローバル化と不平等の関係について検討された。製造業では開発途上国の低賃金労働者を雇用することで、先進国ブルーカラー労働者の職が奪われた可能性もあるが、設計者や経営者には利益がもたらされた。たとえば、iPhoneの付加価値の大半は米国のソフトウェアエンジニアと設計者にもたらされたが、中国の製造業者の取り分はずっと少なかった。同様に、

サービス部門でもグローバル化の効果には表裏がある。地方市場に参入している大手多国籍企業は、地方小売業者から事業機会を奪っている可能性があるが、新しいビジネスモデルと事業価値ももたらしている。

この議論では、結論を求めない形式の2つの質問が挙げられた。1つ目は、米国、英国、フランスなどでのナショナリズムやアンチグローバル化の興隆に現れた政治的圧力により、今後グローバル化は減速していくのか、という質問であった。2つ目は、アンチグローバル化の解決策は包括的な成長 (inclusive growth) であると提案されているが、「包括的な成長」の意味や、それをどう達成させるかがいまだに不明瞭である、というものだった。

自由討論セッションでは、包括的な成長を実現させるための所得均等と政策対応の含意が質問のテーマとなった。セッション出席者は特権階級の問題について議論した。スピーカーの1人は、特権階級は新しい現象ではないのに、スーパースター級の企業はよく理解されていないと感じていた。もう1人のスピーカーは、米国政治では最大の影響力がある利益団体による支配がますます拡大していると語った。労働組合が弱体化しているとも言及された。問題への対処法としては、出席者の大半がドイツや東アジアなどの国際的な例を挙げた。

セッション3：テクノロジーは解決策となるか

セッション3ではまず、被雇用者の経済保障とその革新生産性（革新を生み出す力）について議論された。議論ではまず、現在の概念枠組みの限界が指摘された。現在の枠組み内では住宅資産ショックと被雇用者の革新性との関係性がいくとおりにも解釈できる。つまり、影響はないと論じる向き、革新性が薄れていると論じる向き、依然として今後も革新性は拡大すると見る向きがあった。次に同研究の2つの経験的課題について言及があった。1つは、被雇用者の革新性の産出量は測定しにくいということ。2つ目は住宅資産ショックの影響をどのように明確化するかが明らかではないということ。研究者は、被雇用者の特許取得数と、不動産譲渡証書記録から得た被雇用者の住宅取引をリンクする独自データセットを構築することでこの問題を解決した。さらに、研究者は不動産譲渡証書記録からインベントアの住宅所有とその居住地 (residual location) の詳細を明確化し、次にジップコードレベルの差異 (variation) を住宅価格に利用した。

次に革新性の産出量を明確化する上で採用した戦略と、産出量のさまざまな測定値による結果が提示された。企業全体内と地理的位置での差異 (variation) にかかわる問題を解消するために、明確化では、同一企業内の被雇用者間、そして大都市圏の被雇用者間を比較した。まず研究者は、特許取得数や特許引用数などのさまざまな測定基準を用いて住宅価格ショック後の革新性の低下を観察した。次に研究者は、リスク選好思考 (the risk preferences channel) とは相

反し、住宅価格が上昇したことは被雇用者のリスク回避とは関係がないことを明らかにした。むしろ、住宅価格が低下すると、革新理論について打ち出す能力ではなく意欲の低下が起これ、それに相関して、被雇用者の離職率は低くなる。ここから、雇用の安定を維持し、失敗を避けるために、被雇用者の革新意欲は低くなっていることが示唆された。さらに、被雇用者は「ボトムアップ」革新理論を支持し、企業内でプロジェクトを選択する自主性を持っていることが示唆された。

最後に、いくつかの研究成果が追加発表された。たとえば、社外のオプションが優れていたり、住宅の資産価値が高かったりする被雇用者は、住宅価格の下落に敏感ではないことが明らかになった。他方で、住宅価格が上昇することは、被雇用者の革新産出力に影響していなかった。

テクノロジーが何の解決策となるのかという質問に関しては、経済成長、生産性の低下、所得格差、実質賃金の持続的な上昇など、どのテクノロジーが解決策となりうるか、という質問が提示された。テクノロジーの展開と普及は、特定の社会、経済、政治、テクノロジーの文脈に大きく依存することが強調された。

次に、「アルゴリズム革命」という考え方が、革新の主たる促進要因として紹介された。これは人間の行動をアルゴリズムで変えるというものである。特に注目されたのは、人間の行動をアルゴリズムで計測すれば、その行動を分割、変換、再結合、拡大できるということである。共有経済、アグリテック、フィンテック、ロボティクス、モノのインターネット（IoT）、人工知能など、これらすべてがこのカテゴリーに入る。アルゴリズム革命は、計算資源について希少なものを豊富な資源へと転換することで可能となると言われている。人類はその歴史の大半にわたり、情報を保存し処理する能力を有してきたが、アルゴリズム革命は、情報を豊富な資源へと転換する世界規模のクラウドコンピューティング・テクノロジーに見られるような、飛躍的な計算能力の出現を意味する。

最後に、豊富な計算能力の実証例として人工知能（AI）の詳細が議論された。たとえば、グーグル・ディープマインドのプログラムは、世界有数の囲碁棋士を破ったのみでなく、グーグル社データセンターのエネルギー効率を 40% 向上し、使用電力を 15% 削減するなど冷却効率の最適化も実現した。このようなテクノロジーがサブスクリプションサービスなどの形態で一般社会に普及すれば、影響力は絶大となろう。

セッションの終わりには、AI は人間の代用になるかが討議された。AI は IA（intelligence augmentation：知能増幅）となるため、低習熟度の労働者は機械に取り代わられるのではなく、むしろ IA の支援を受けながら高度な仕事をするようになるという意見があった。最後に忘れてならないこととして、日米では文脈が異なることも言及された。米国ではテクノロジーが労働者から職を奪うことを懸念しているが、日本はテクノロジーを活用して労働力不足を補うこ

とを望んでいる。

事業に対する、テクノロジーの強まりつつある影響についても議論された。まず、CEO を対象とした国際的調査の結果が紹介された。米国 CEO の 86% が、テクノロジーの進歩は今後 5 年で自社事業を変革させると述べるなど、テクノロジーの飛躍的発展は、根本から事業の継続性を変える 5 つのグローバルメガトレンドの筆頭となっている。その業界がテクノロジーにより再構築されると予想する CEO の割合は 20 年前より増えている。

同調査では、日本の CEO の結果を強調しながら、日本がいかに遅れをとっているかも明らかにされた。今後 12 か月の、自社成長予測への自信についての質問では、非常に自信があると答えた日本の CEO は 14% に過ぎなかった。これは、世界平均の 38% より低く、実際、世界でも最下位の方であった。また、デジタルスキルに長けていると答えた CEO は世界平均では 55% だが、日本は 29% に過ぎなかった。その上、デジタル関連リスク、ガバナンス、リスクマネジメントへの対応策をすでに講じていると答えた米国の CEO は 71% だが、日本の CEO は 47% に過ぎなかった。

次に、71 か国の 1,300 人超に実施した、フィンテックのグローバルトレンド関連の調査結果が示された。いくつかの重要な洞察があった。1 つは、決済代行業、銀行業、保険業、資産運用業などの既存金融企業の 88% がイノベーターに敗れて収益を失っているという懸念を高めていることであった。2 つ目は、金融機関は既存の価値を打ち壊すようなフィンテックの特性を受け入れ、その 56% が変革を自らの戦略の根幹に据えていることであった。3 つ目は、金融機関は提携関係を構築し統合することも学んでおり、その 82% は今後 3 年から 5 年のうちに、フィンテックとの提携増を見込んでいることであった。4 つ目は、大手金融企業とフィンテック企業は、セキュリティ、規制の不確実性、マネジメント・文化・ビジネスモデルの相違、にかかわる課題に直面していることであった。

最後に、日本の金融機関がフィンテックを受け入れる速度は世界のトレンドより緩慢であることが明らかになっている。たとえば、金融機関によるフィンテック関連事業投資額の、対年間収入比率は世界平均では 15% だが、日本は 6% に過ぎない。また、フィンテックへの年間期待収益率は世界平均では 20% だが、日本ははるかに低く 6% に過ぎない。日本の金融機関はフィンテックのメリットについて、異なる予想もしている。世界では 60% の回答者が商品とサービスの拡大によりフィンテックは収益増に資すると予想しているのに対し、日本では 58% がフィンテックは人件費削減に資すると予想している。その上、世界ではフィンテックの登場で市場シェアを失うことをもっとも懸念しているが、日本の金融機関の大半は情報セキュリティやプライバシーへの脅威を懸念している。全般的に、日本の金融機関は顧客との対話に（インターネット、モバイル、ソーシャルメディアを問わず）デジタル手段を導入することには遅れている。最後に、日本の金融機関はフィンテックの改革に対するさまざまな規制の障壁についても報告している。それから、テクノロジーの進展に伴っていかに事業を推進するかという質問

が出された。

最後の発表は業界の一例を取り上げて、上記の問題への解答を示した。革新の基本となるのは、知識、創造力、行動の3点と考えられる。知識とはテクノロジーのノウハウだけではなく、創造性にあふれる事業モデルをも意味する。創造力に必要なことは、首尾一貫した考え方が、多様性と適切に設計された革新プラットフォームに基づいていることである。最後に、革新について学ぶ最善策は、コンセプトに基づき行動し、経験を積むことである。

次に企業がシリコンバレーのエコシステムを活用する方法の一例として、三菱商事の「M-ラボ」が紹介された。M-ラボは異業種間の連携推進による、水平統合戦略を採用している。その事業展開は、多様な加盟企業の専門家による、確かな調査とフィージビリティ・チェックに基づいている。M-ラボはプロトタイプを作り、提案を重ねて、迅速かつ柔軟にビジネスモデルを創出している。その結果、M-ラボはシリコンバレーのエコシステムの1つとなっている。

特に、M-ラボの加盟企業がいかに相互提携し、異業種と考えを首尾一貫させているかを示すため、いくつかのサンプルプロジェクトが使われた。その1つが「AKXY（アクシー）」というコンセプトカーである。化学企業の旭化成が開発した「AKXY」は、自動車関連素材や技術を幅広く紹介するもので、シリコンバレーで開発されたデジタルツールを活用している。

最終セッションでは、日本企業がテクノロジーやシリコンバレーに強い関心を持っていることも示された。日本企業はシリコンバレーから新しいアイデアを学ぶと同時に、シリコンバレーのエコシステム全般に貢献もできると考えられている。その実現には、各国のさまざまな規制当局間でのより良い協力関係が必要である。

最終討論では、革新のさまざまな要因、特に、日本とシリコンバレーの相違点がテーマとなった。スピーカーの1人は、日本企業は言語障壁の問題に直面していると語った。他のスピーカーは規制の壁、特にフィンテックなどの新興分野での壁も日本企業への制約となっていると言及された。また日本人には失敗を受け入れる文化がないとも言及された。資金と人間という重要な要因間のバランスをとっているシリコンバレーの特異性についても言及された。たとえば、カリフォルニアには新製品を積極的に試そうとする顧客基盤があるが、日本の顧客は非常に保守的である。日本の事業では、組織が重要な役割を果たすという点も米国とは異なる。従って、革新の推進のために、日本企業は各組織に革新的な人員を配置することで解決策を見出す必要がある。これは先ほどの被雇用者の雇用安定と革新についての発表内容につながる。組織が革新的になるためには、失敗を寛容するなどの革新に好意的な文化を組織内に構築することが重要である。

Summary

US-Japan Forum 2017

Economic Policy Challenges in the US and Japan

On June 2, 2017, the 2017 US-Japan Forum was held at Stanford University. The forum started with opening remarks from Takeo Hoshi, Director of the Japan Program at Stanford's Asia Pacific Research Center (APARC), and Kazumasa Kusaka, Chairman and CEO of the Japan Economic Foundation (JEF). The forum discussed three main topics: growth strategy; populism, globalization, and social equity; and technology innovation.

Session One: Growth Strategies of the US and Japan

The first session provided an overview of the current status of the Japanese economy. The real side of the Japanese economy is doing well: the economy expanded by 2.2% in the first quarter of 2017, above the expected growth potential; with an unemployment rate of 2.8%, Japan is close to full employment; nominal wages also increased by 2%; and although the working age population has been declining by 1% each year, it has been made up by increasing labor force participation of the female and elderly. In particular, female labor force participation rate has reached a historical high, even surpassing that of the US.

Yet the Japanese economy is also facing challenges. First of all, the inflation rate is still near zero, suggesting that Japan's QQE policy might be reaching its limit. Secondly, the Japanese government has high fiscal deficits, with a debt-to-GDP ratio as high as 240%. Meanwhile, despite the increase in nominal wages, real wages are not rising enough, which can lead to weak domestic consumption. Finally, Japan continues to face a severe labor shortage problem due to its demographic transition.

To address the above challenges, the third arrow of Abenomics, namely the growth strategies to increase productivity and wages, was proposed. Several key areas were pointed out that need structural reforms. First of all, Japan needs to improve the global competitiveness of its workers through education and labor reforms, in particular, by increasing the workers' English proficiency and IT skills, as well as by introducing a more flexible hiring and firing system. Secondly, to optimize capital allocation, Japan needs a capital market reform to improve its corporate governance and pension fund management.

Thirdly, Japan needs to further open up its domestic market, especially its agriculture sector such as the rice and dairy product industries, to promote international trade. Finally, the medical and healthcare industry also needs a reform to lower Japanese people's medical expenditure but not lower the quality.

Following the topic of debt, a model of how excessive debt in the private and public sector can lead to persistent stagnation was proposed after a review of Japan's debt problem in history. During the high growth era in the 1980s, Japan's debt problem took the form of asset bubbles. After the bubble economy collapsed in the early 1990s, the Japanese economy was then plagued by non-performing loans. And as the non-performing loans problem began to be resolved in the early 2000s, Japan's public debt has been rising since then and is exploding in the 2010s. A new model was then developed in which excessive debt can depress the economy persistently and simulation results were shown in comparison to the US and Japanese economic data.

This model then has several policy implications for economic growth. Since private-sector debt may cause persistent stagnation, like the case of Japan in the 1990s, debt reduction may be the direction to go for. In particular, for corporate or household debt, bank recapitalization and write-off of non-performing loans as well as debt forgiveness and restructuring of the borrowers could be helpful. On the other hand, for public debt which may also cause persistent stagnation, fiscal consolidation is the way out. Nevertheless, the current policymakers may not have the incentive to implement fiscal consolidation since it is an inter-generational investment by nature: while the current generation pays the cost, i.e., higher tax, it is the future generation that enjoys the return, i.e., economic stability. Therefore, it is necessary to have a political reform to create an independent fiscal agency that represents the interests of the future generation.

Management practice is another area that speaks to the third arrow of Abenomics aimed to increase productivity. The World Management Survey (WMS) dataset provides valuable information. This survey is carried out by a 30-person survey team every three years and has covered more than 20,000 firms since 2002. There are three key components of the survey methodology. First, researchers developed scorecard for 18 management practices, covering such topics as track of performance, targeting, and the promotion system. This information is then collected through a 45-minute phone interview with the plant managers. Second, to get firms into the interview, this survey is introduced as a "lean-manufacturing" interview without any financial details. Meanwhile, this study has received official endorsement, such as from the Deutsche Bundesbank, the Reserve Bank of India, the World Bank, etc. Third, this survey uses a "double-blind" method to obtain unbiased comparable responses: interviewers do not know in advance the company's performance and managers are not informed in advance that they are scored.

The survey results reveal the impacts of management practices on economic performance. Overall, a

huge spread is found in management practices across firms and countries. Furthermore, the management scores are positively correlated with measures of firm performance such as productivity, profit, output growth, export, R&D per employee, and patents per employee. To examine whether a causal relationship exists, the researchers then conduct a randomized control trial and find that on average management practices account for 31.4% of total factor productivity. For Japan, however, this number is only 8.82%, far below other OECD countries.

This project also has policy implications. First, foreign direct investment should be encouraged, because multinational firms tend to bring good management practices to wherever they are located. Second, since family-run and government firms are found to have poorer management, promoting professional ownership can be helpful. Third, raise the education level of both non-managers and managers, as higher education seems linked to better management. Finally, deregulation may also help, as more regulations are correlated with less effective management practices. In particular, it is suggested that attracting multinationals and minimizing regulations are more relevant for Japan, while the U.S. should consider improving education and also minimizing regulations.

The first session concluded with a comparative analysis on growth strategies in the US and Japan. The reason why growth is important is that it helps solve the problems of debt, income inequality, among many others. As an example, the work of Raj Chetty shows that while growth is slow, the ability of children to surpass their parents drops significantly.

Then a comparative overview of growth around the world was provided. First, it is emphasized that the US and Japan are still the richest countries in per capita terms, well ahead of other large economies such as China and India. Nevertheless, the contribution of developed countries to gross world product has indeed been diminishing. The decrease mainly comes from Europe and the share of Japan has remained almost the same.

There are several reasons why other countries have been catching up. On the one hand, the quality and quantity of labor in developed countries are not sufficient to sustain growth – they are not only falling behind in education, but also their people work less on average. Besides, the room for growth is much smaller today since most US and Japanese large firms have already adopted the good management practices that greatly increase productivity. On the other hand, Asia is developing rapidly because they are investing a lot in capital, labor, and technology. They are at an advantageous position as they can leverage the existing ideas in developed countries.

The first session concluded by speaking to the future. Three different views of innovation were mentioned: the pessimistic view that all innovations are past, the positive view that technology is the key, and the classical knowledge diffusion view. In particular, attention was paid to the relationship

between demographics and entrepreneurship. It seems that younger countries have higher levels of entrepreneurship, probably because younger people are more creative and they are not given enough opportunities in large companies. Finally, the policy package of the Trump administration was discussed. Among all the measures, tax cuts, deficit reduction, and deregulation in certain areas are on the agenda of Trump. Yet he is not doing enough on many key issues such as investment, trade, rule of law, good governance, and especially immigration.

In the Q&A session, participants discussed the key issue of how to increase the productivity of labor, capital, etc., in the US and Japan. For example, when answering the question why structural reform has been slow in Japan, one speaker mentioned how the political system had been unfavorable for reforms, and another speaker pointed out how the low interest rate had suppressed people's incentive to change. Much discussion also went around demographics and innovation. It is considered important to get older workers back into labor force. Participants also talked about the impact of automation. There is increasing skepticism as labor productivity seems to remain low despite technology improvement. Finally, it is mentioned that large companies may be one of the factors of declining entrepreneurship and therefore it is important to help small- and medium-sized firms do better.

Session Two: Globalization and Inequality

The second session started with a discussion on the definition of inequality from different perspectives. While economists view inequality as a problem because of the welfare loss from a utilitarian approach, common people perceive inequality as when they do not get things they deserve or someone get things they do not deserve. It is from this point that tension arises and why it is difficult to measure inequality both temporally and geographically. For example, it used to cost \$2,000 to buy the Encyclopedia Britannica, but now everyone has free access to Wikipedia – and this change is not entering any economic statistics. Also, although there has been a trend of convergence among global population since 1976, it is only due to the catch-up of China and India.

Discussions also went around the causes of inequality in the era of globalization. The causes of the decline in manufacturing employment in the U.S. can be decomposed into several parts – manufacturing employment dropped from 30% to 12% because the U.S. failed to improve its education along with technology. The rate further dropped from 12% to 9% because of the fiscal policy mistakes during the Reagan and Bush administrations. The China shock then explains the decrease from 9% to 8.7% and the NAFTA accounts for the rest from 8.7% to 8.6%. That is to say, technology and education are the real causes of inequality, and globalization is just a scapegoat.

After an empirical description, the social and political implications of globalization and inequality were

discussed. Two differences between the US and Japan as well as other OECD countries were pointed out. Firstly, poverty in the US is associated with ethnicity and political parties. For instance, although white males in the South are the largest beneficiaries of Obamacare, they voted against their own interests in favor of racial and ethnic minorities. Moreover, poverty is not the pure driver of inequality. Instead of the poorest population, it is the second-to-bottom class who lose their positions are most unsatisfied with the current situation. Secondly, inequality in the US is related to gender division. The official unemployment rate is 4.4%, yet male labor force participation has not risen.

The above issues have several consequences. Socially, the drop in male labor force participation has huge negative effects on families. Now there are a majority of white teenagers living with single mothers. Also, drug abuse has been rising and life expectancy decreasing in the past decade for the working class males. This change has further political implications. The Democrats used to rely on the working class voters, but now they are losing supporters to the Republicans. And identity could be the channel – it is the perceived unfairness rather than absolute poverty that affects voters' attitudes towards issues such as immigration.

Finally, discussion was also held about the varieties of populism around the world. It is argued that populism has not become a globalization problem because it takes different forms in different regions. In particular, two factors render populism less an issue in Asia. It is partly because there is no large-scale immigration in Asia, and partly because Asian country leaders, such as Xi of China and Abe of Japan, are good at mobilizing nationalism in a way such that identity is not a destabilizing factor.

More insights on globalization was then offered from an industry perspective. First, an overview about the manufacturing and service sectors in a globalized era was provided. For instance, the supplier map of an iPhone 6 or a Boeing 787 well demonstrates that globalization has been widely spread and deeply rooted in today's supply chains. Similarly, fast food chains such as McDonald's, fast fashion brands such as H&M, and IT service providers such as Uber and Airbnb also speak to the magnitude of globalization.

The current landscape of free trade agreements (FTAs) and regional cooperation is also mentioned. As of December 2016, there are 286 FTAs that are in effect, with additional 18 agreed but not ratified, 79 in negotiation, and 22 in preparation. In particular, although the US abandoned the Trans-Pacific Partnership (TPP), the remaining 11 nations are working together ahead while leaving the door open for the US.

Finally, the relationship between globalization and inequality was addressed. In the manufacturing industry, the utilization of cheap labors in developing countries might have deprived developed countries of blue-collar workers, but has also created profits for designers and managers. For example,

the bulk of value-added of iPhones goes to the software engineers and designers in the US, while manufacturers in China receive a much smaller proportion. Similarly, the effect of globalization is also two-sided in the service industry. Although large multinational companies entering local markets might deprive local merchants of business opportunities, they are also bringing new business models and values.

This discussion raised two open-ended questions for discussion: first, whether globalization will slow down due to the political pressure as embodied in the rise of nationalism and anti-globalism in the US, Britain, France, etc.; second, it is proposed that inclusive growth is the solution to anti-globalism, but it is still unclear what inclusive growth stands for and how to achieve that.

In the open discussion session, questions focused on the implications of income equality and policy measures to achieve inclusive growth. Participants talked about the issue of the overclass. One speaker thought that superstar firms are not understood well, even though the overclass is not a new phenomenon. Another speaker said that American politics is increasingly dominated by the most powerful interest groups. It is also mentioned that the role of unions has been declining. As for how to address the problem, most of them referred to international examples such as Germany and East Asia.

Session Three: Is Technology the Answer?

The last session started with a discussion on employees' economic security and their innovation productivity. The discussion started by pointing out the limitation of the current conceptual framework, in which the relationship between household wealth shocks and employee innovation is ambiguous: some argue there is no effect, some argue for a decrease in innovation, yet still others argue there will be an increase in innovation. Then two empirical challenges of the study were mentioned: first, it is difficult to measure employee innovation output; second, it is unclear how to identify the effect of housing wealth shocks. The researchers overcome the difficulties by constructing a unique dataset that links employees' patent output with their housing transactions from deed records. Moreover, they identify home ownership of inventors and their precise residual location using deed records and then exploit zip-code level variation in housing prices.

Then the identification strategy and main results with different measures of innovation output were presented. The identification compares employees within the same firm and metropolitan areas to alleviate the concerns regarding variation across firms and geographical locations. The researchers first observe a decrease in innovation following housing price shocks using different metrics, such as number of patent, citation of patent, etc. They then find that inconsistent with the risk preferences channel, increases in housing prices are not correlated with employees' risk aversion. Instead, consistent with the decreased willingness rather than ability to innovate theory, decreases in housing prices lead to lower

probability of employees' departure from the firm. It suggests that employees are less willing to innovate due to desire to maintain job security and avoid fault. It further suggests that employees have autonomy within firms to select projects, in support of the "bottom-up" innovation theory.

Finally, there are several additional results of the study. For example, it is found that employees with better outside option or more equity in the house are less sensitive to house price declines. On the other hand, increase in housing prices does not affect employees' innovation productivity.

As for the question if technology is the answer, several questions to which technology may be the answer, such as economic growth, productivity slowdown, income inequality, and sustained rises in real wages, were proposed. It is then emphasized that technological deployment and diffusion depends largely on specific social, economic, political, or technological context.

The idea of the "Algorithmic Revolution" was then introduced as the core driver behind innovation. It refers to the transformation of human activities with algorithms. In particular, once human activities are algorithms, they can be split apart, transformed, recombined, and magnified. Sharing economy, Agritech, Fintech, robotics, Internet of things, Artificial Intelligence, etc., all fall into this category. It is said that the algorithmic revolution is enabled by the transformation of computing resources from scarce to abundant resource. Although human beings have the ability to store and process information throughout most of the history, it is the advent of computing power, such as the global-scale cloud computing technology, that transforms information into abundant resource.

Finally, artificial intelligence (AI) was discussed in details as an example to demonstrate the power of abundant computing. For example, Google's Deep Mind not only beat the world's best Go players, but also optimized the cooling of Google's datacenters such that energy efficiency is increased by 40% and electricity consumption decreased by 15%. If such technology becomes available to the general public, such as in the form of a subscription service, the impact would be enormous.

In the end, the discussion addressed the debate whether AI could replace humans. One answer was that AI could be turned into IA, intelligence augmentation, so that low skilled workers would not be replaced by machines but rather provide high skilled work with the help of IA. Last not but least, it is also mentioned that the US and Japanese contexts are different: while the US is worried of technology robbing workers of jobs, Japan hopes to leverage technology to fill its labor shortage.

Technology's growing influence on business was also discussed. First, the results of an international survey of CEOs were introduced. Technological breakthrough is the top of the five global megatrends that are fundamentally disrupting business, with 86% of US CEOs saying that technological advances will transform their business over the next five years. The proportion of CEOs who expect their

industries to be reshaped by technology becomes larger than 20 years ago.

The survey also showed how Japan is lagging behind by highlighting the results of Japanese CEOs. When asked about their confidence in their company's growth prospect over the next 12 months, only 14% of Japanese CEOs are very confident, lower than the 38% global average and actually ranking among the lowest. Also, only 29% of Japanese CEOs said they have strong digital skills, as compared to the global average of 55%. Besides, while 71% of US CEOs are already addressing the risks around digital, governance, and risk management, only 47% of their Japanese counterparts are doing so.

Then the results of another survey on the global trends of Fintech with over 1300 respondents from 71 countries were shared. There are several key insights: first, 88% of existing financial businesses, such as payments, banking, insurance, and wealth management, are increasingly concerned they are losing revenue to innovators; second, financial institutions are embracing the disruptive nature of Fintech, with 56% of them having put disruption at the heart of their strategy; third, financial institutions are also learning to partner and integrate, with 82% of them expecting to increase Fintech partnerships in the next three to five years; fourth, incumbents and Fintech companies are facing challenges around security, regulatory uncertainty, and differences in their management, culture, business models.

Finally, it is revealed that financial institutions in Japan are embracing Fintech at a slower pace than the global trend. For example, Japanese financial institutions only invest 6% of their annual revenue in Fintech-related matters, as compared to the global average of 15%. Also, only 6% of their expected annual return on investment is related to Fintech, much lower than the global average of 20%. Japanese financial institutions also have different expectations on the benefits of Fintech: while globally 60% of respondents expect Fintech to help grow revenue by expanding products and services, in Japan 58% expect Fintech to help reduce headcount costs. Besides, while globally respondents worry most about loss of market share with the advent of Fintech, the majority of Japanese respondents worry about information security and privacy threat. Overall, Japanese financial institutions are slower in adopting digital channels, whether it is web-based, mobile, or social media, to interact with customers. Finally, Japanese financial institutions also report different regulatory barriers to innovation in Fintech. From there, a question was asked of how to promote business along with the development of technology.

The last presentation answered to the above question by providing an industry example. Three points are considered fundamental to innovation: knowledge, creativity, and action. Knowledge not only refers to technology knowhow, but also creative business models. Creativity then requires that the connected ideas are based on diversity and a well-designed innovation platform. Finally, the best way to learn about innovation is through action of concepts and accumulation of experiences.

Then the M-Lab of Mitsubishi Corporation was introduced as an example of how business can tap into

the Silicon Valley ecosystem. M-Lab adopts a horizontal integration strategy by promoting collaboration across different industries. Its business development is based on solid research and feasibility check with industry experts from various member companies. Through much prototyping and presenting, M-Lab then creates business models with speed and flexibility. Eventually, M-Lab also becomes part of the Silicon Valley ecosystem.

In particular, several sample projects were used to demonstrate how the member companies of M-Lab are collaborating with each other and connecting ideas from different industries. One of them is a concept car called AKXY. It is developed by the chemical company Asahi-Kasei to showcase a wide array of automotive-related materials and technologies. The concept car utilizes the digital tools developed in the Silicon Valley.

The final session also showed the strong interests of Japanese companies in technology and the Silicon Valley. It is believed that while Japanese firms learn new ideas there, they can also contribute to the whole Silicon Valley ecosystem. For that to work, there needs a better alignment among different regulatory agencies across countries.

The last discussion session focused on various factors of innovation, and especially the difference between Japan and the Silicon Valley. One speaker mentioned that Japanese companies face language obstacles, and another speaker added that regulatory barriers, especially in emerging fields such as Fintech, also constrain Japanese firms. It is further mentioned that the Japanese miss a culture of accepting failures. The discussion also mentioned the uniqueness of the Silicon Valley that there is a balance between key factors such as money and people. For example, California has a customer base that is very willing to try new products, while Japanese consumers are quite conservative. Japan also differs from the US in that organizations play a critical role in business. Therefore, to promote innovation, Japanese companies have to come up with solutions by having innovative people in each organization. This point speaks to the presentation around employees' job security and innovation. It is therefore important to establish a favorable culture, such as tolerance of failures, in organizations for them to be innovative.

7. 発表資料

発表資料

Session 1 「日米の成長戦略」

「Growth Strategies of the US and Japan」

① Nicholas Bloom (Stanford University)

② 伊藤 隆敏 (コロンビア大学国際関係・公共政策大学院 教授)

③ 小林 慶一郎 (慶應義塾大学経済学部 教授)

Session 2 「グローバル化と不平等」

「Globalization and Inequality」

④ 岡田 秀一 (石油資源開発株式会社 代表取締役社長)

Session 3 「テクノロジーは解決策となるか？」

「Is Technology the Answer? (or Will Silicon Valley Save the World?)」

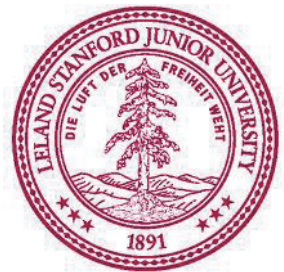
⑤ 田中 正明 (PwCインターナショナル シニアグローバルアドバイザー)

Management and the Wealth of Nations

Nick Bloom (Stanford)

based on work with Renata Lemos (World Bank),
Raffaella Sadun (Harvard), Daniela Scur (Oxford)
& John Van Reenen (LSE/MIT)

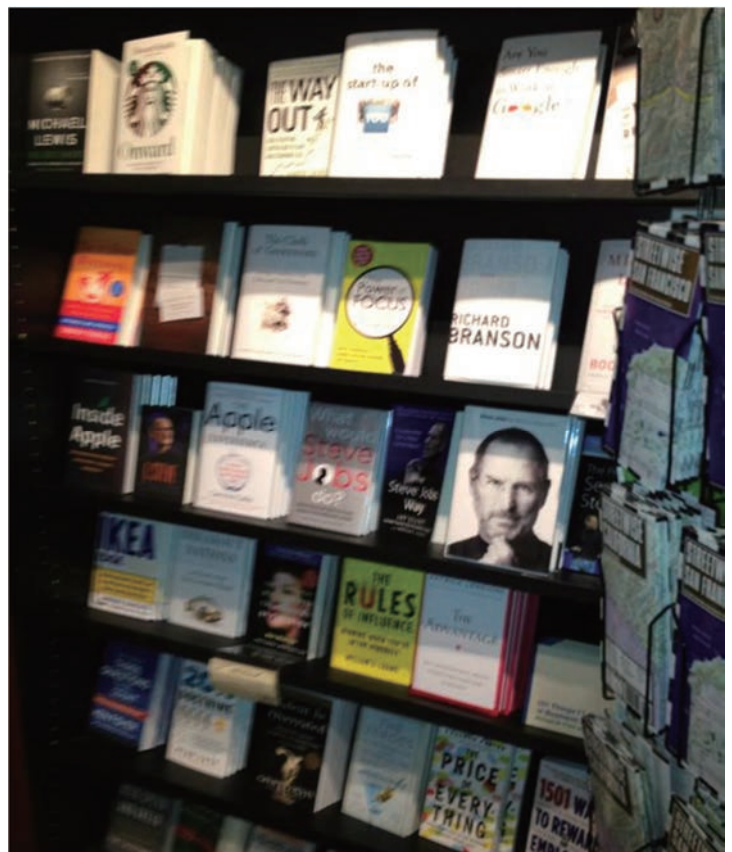
Stanford June 2nd 2017



Management research has a bad reputation of being airport books and case studies...

“No potential driving factor of productivity has seen a higher ratio of speculation to empirical study”

- Chad Syverson (2011, Journal of Economic Literature)



Part of a research group looking scientifically at management, and summarize 15+ years research

1) Measuring management

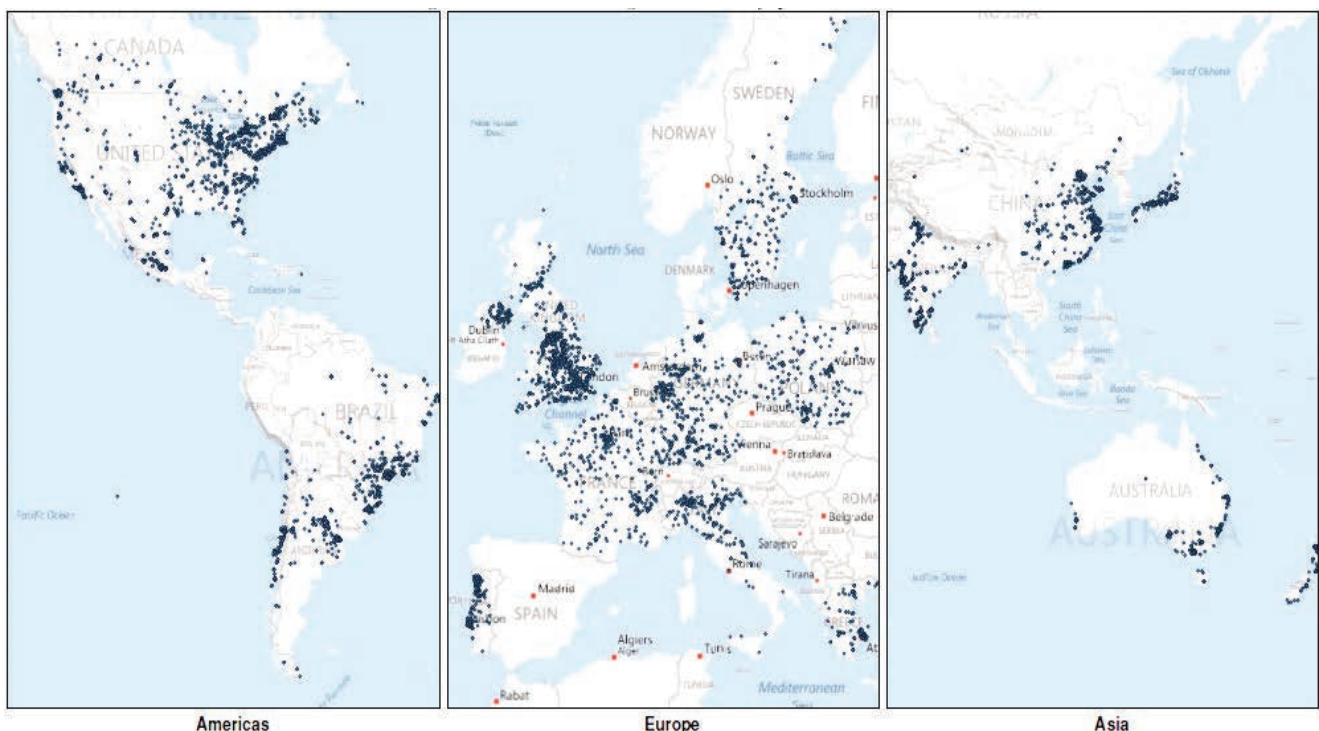
2) Impact of management on performance

- Regression results
- Field experiments

3) Drivers and policy



World Management Survey has covered more than 20,000 firms since 2002



Carried out by survey teams of about 30 people about every three years (London 2006)



Survey methodology (Bloom & Van Reenen, 2007, QJE)

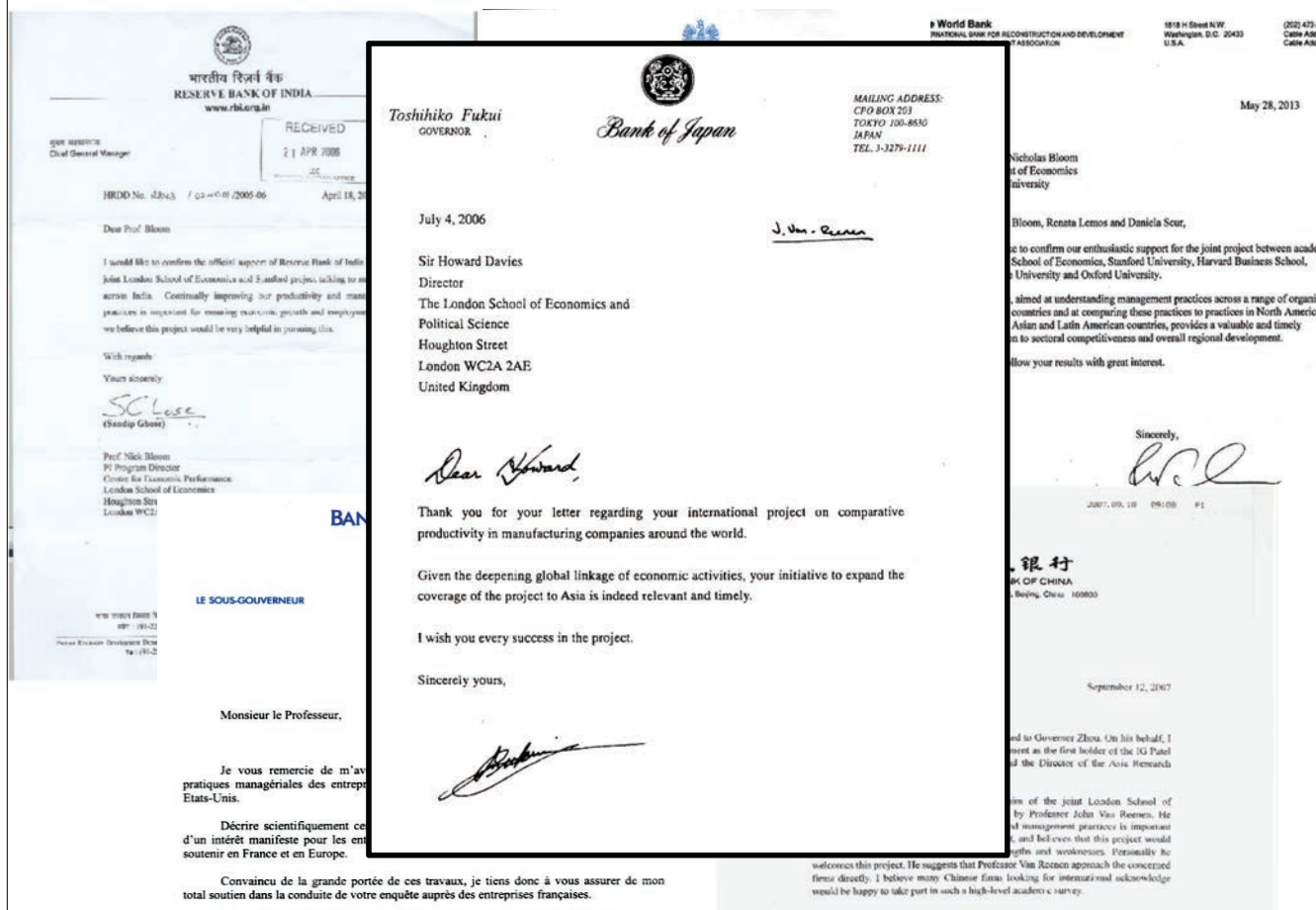
1) Developing management questions

- Scorecard for 18 monitoring, targets & people management practices ≈45 minute phone interview of plant managers

2) Getting firms to participate in the interview

- Introduced as “Lean-manufacturing” interview, no financials
- Official Endorsement: Bundesbank, RBI, World Bank etc.

Some typical endorsement letters



Survey methodology (Bloom & Van Reenen, 2007, QJE)

1) Developing management questions

- Scorecard for 18 monitoring, targets & people management practices ≈45 minute phone interview of plant managers

2) Getting firms to participate in the interview

- Introduced as “Lean-manufacturing” interview, no financials
- Official Endorsement: Bundesbank, RBI, World Bank etc.

3) Obtaining unbiased comparable responses, “Double-blind”

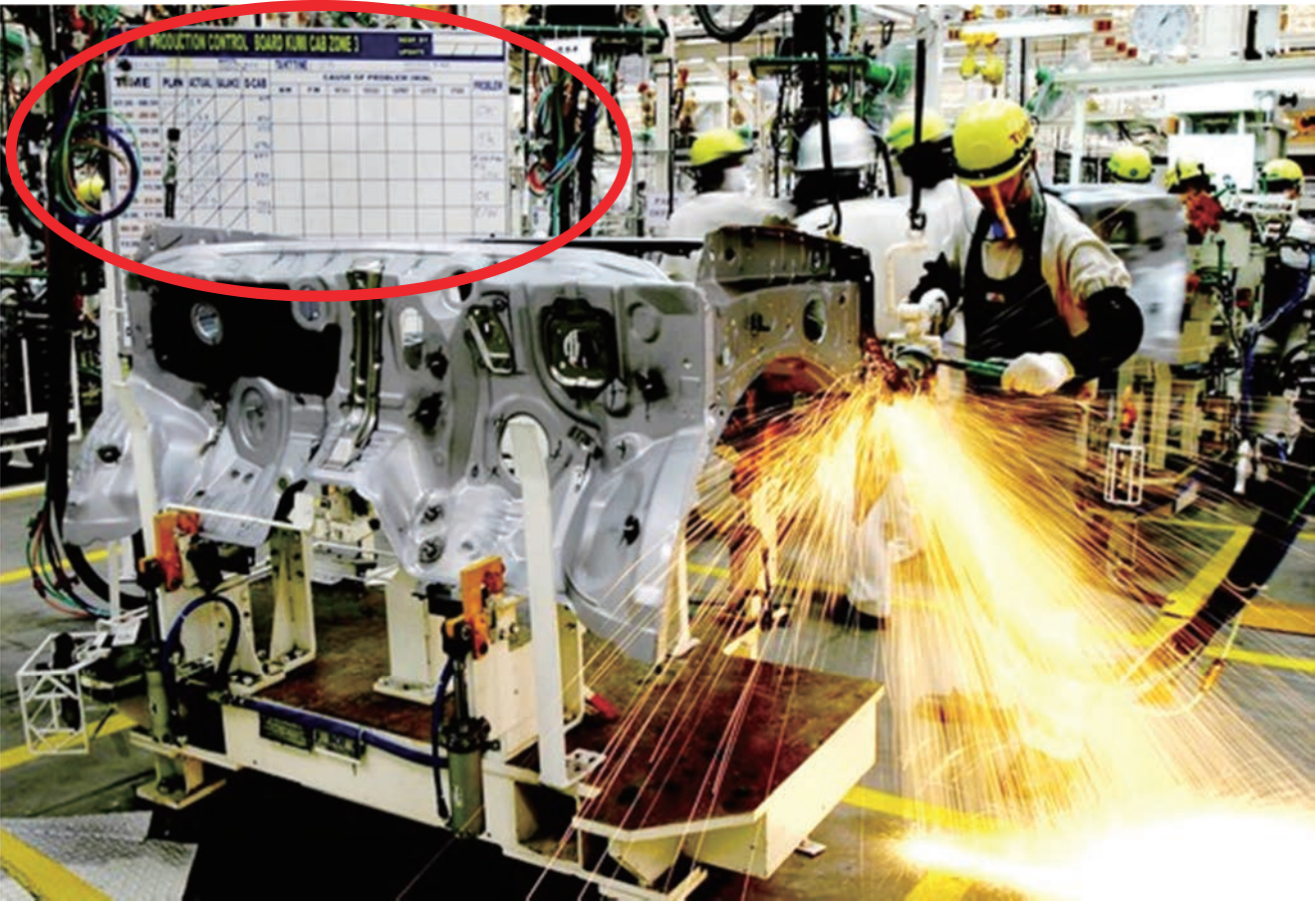
- Interviewers do not know the company’s performance
- Managers are not informed (in advance) they are scored

Example monitoring question, scored based on a number of questions starting with “How is performance tracked?”

Score	(1): Measures tracked do not indicate directly if overall business objectives are being met. Many processes aren't tracked at all	(3): Most key performance indicators are tracked formally. Tracking is overseen by senior management	(5): Performance is continuously tracked and communicated, both formally and informally, to all staff using a range of visual management tools
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Note: All 18 questions & 50+ examples in <http://worldmanagementsurvey.org/>

Examples of performance metrics – Car Plant

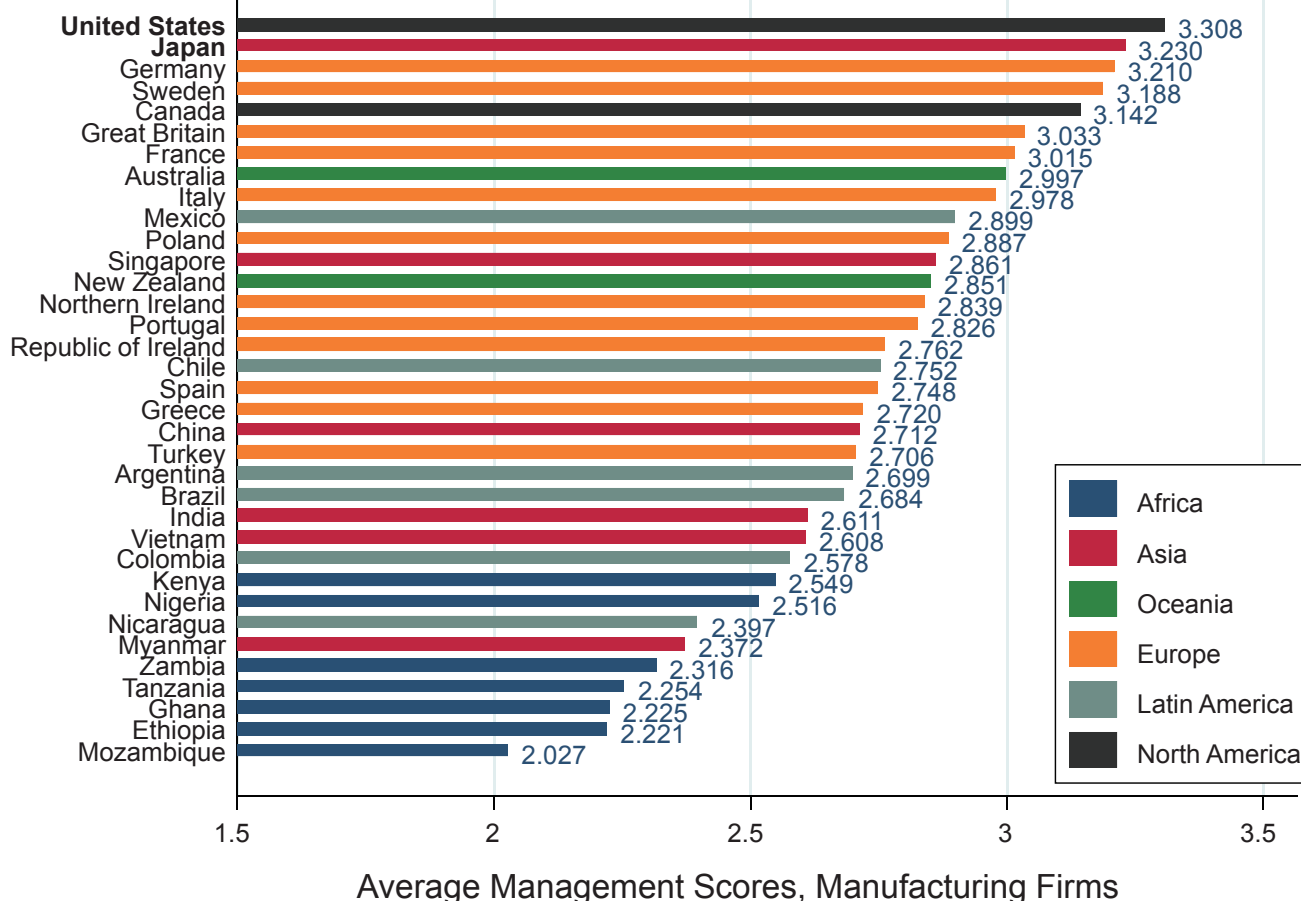


Example incentives question, scored based on questions starting with “*How does the promotion system work?*”

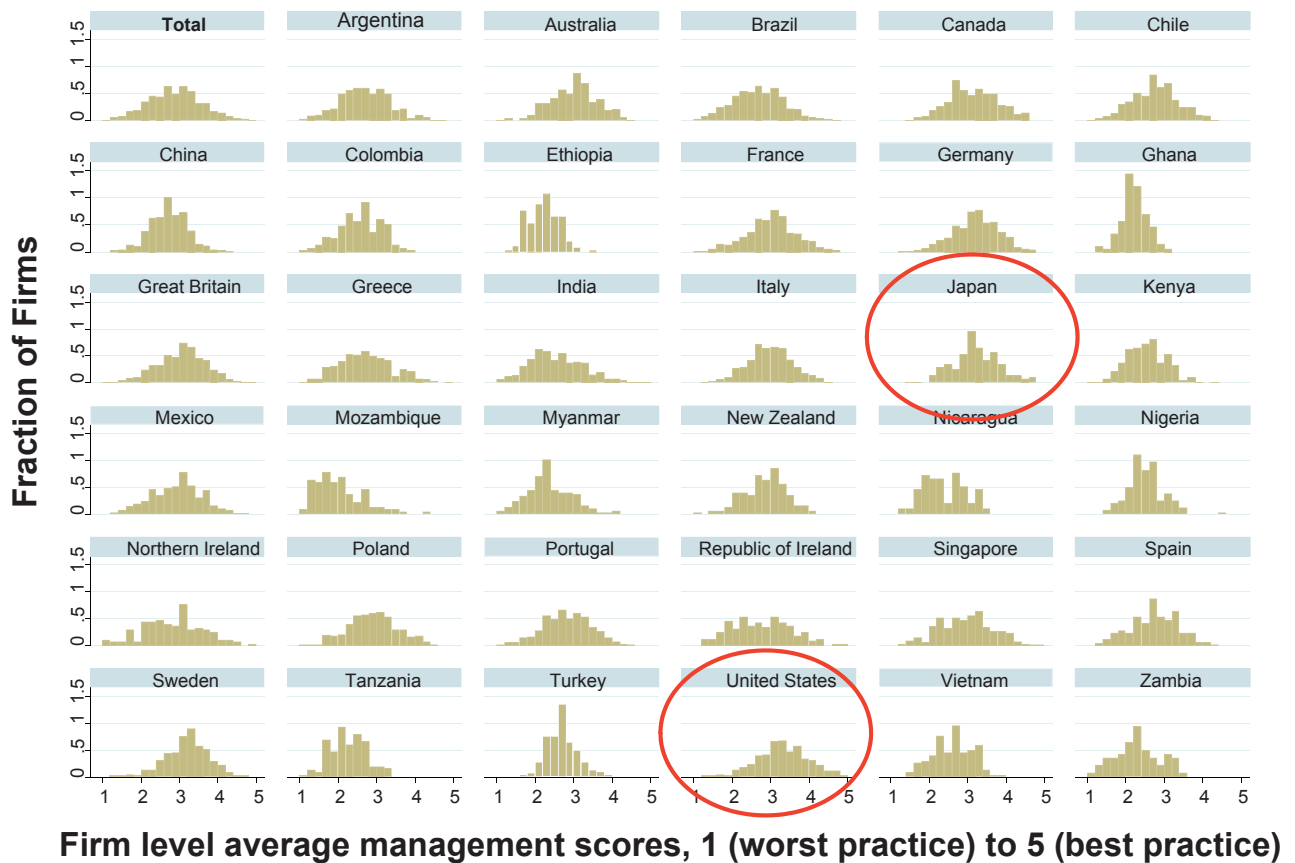
Score	(1) People are promoted primarily upon the basis of tenure, irrespective of performance (ability & effort)	(3) People are promoted primarily upon the basis of performance	(5) We actively identify, develop and promote our top performers
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Note: All 18 questions & 50+ examples in <http://worldmanagementsurvey.org/>

Wide spread of management in manufacturing



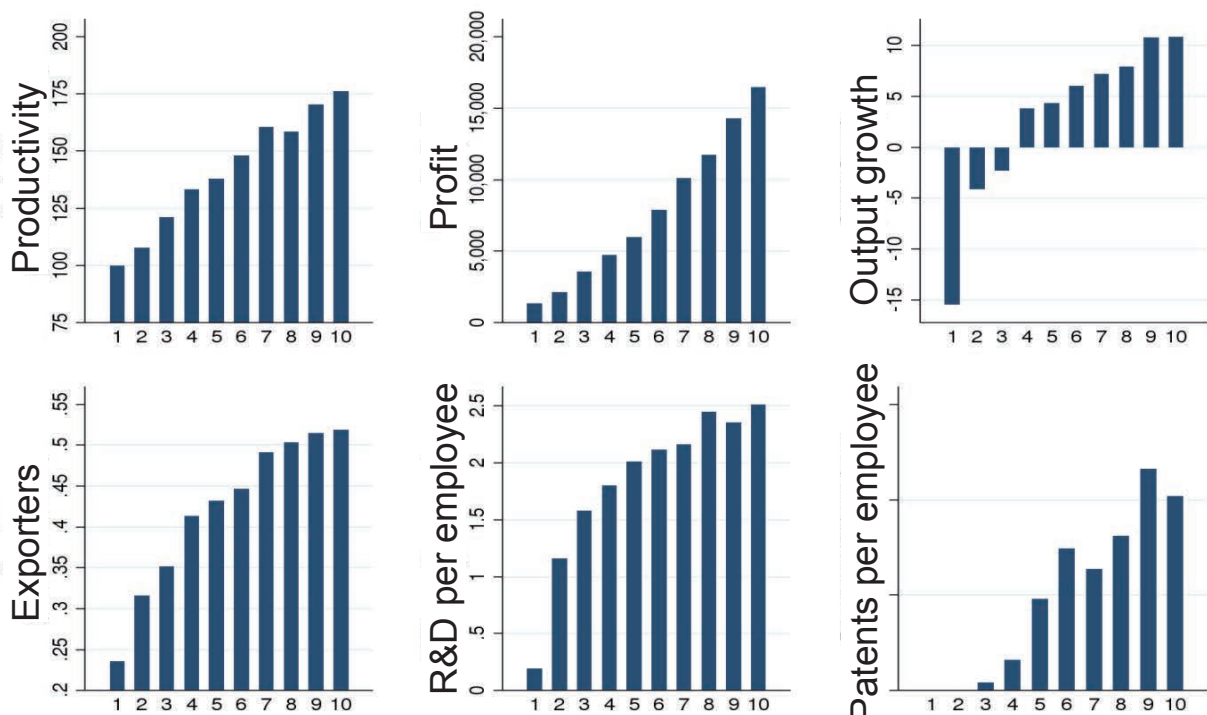
Management also varies heavily within countries



So we find a huge spread in management practices across firms and countries....

....but does this matter?

These management scores are positively correlated with firm performance



Management score decile (worst=1, best=10)

Of course this correlation may not be causal.

So I've also been working with the World Bank on management randomized control trial

THE
QUARTERLY JOURNAL
OF ECONOMICS

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February 2013

Issue 1

DOES MANAGEMENT MATTER? EVIDENCE FROM INDIA*

NICHOLAS BLOOM
BENN EIFERT
APRAJIT MAHAJAN
DAVID MCKENZIE
JOHN ROBERTS

Pulling all our data together we estimate management accounts $\approx 1/3$ cross-country TFP gaps

	(1) Weightd Man- agement	(2) Covariance	(3) Unwghtd Man- agement	(4) Weighted Mng. Gap with US	(5) % reallo- cation	(6) TFP Gap With US	(7) % TFP due to Man- agement
Average					24.93		31.4
US	.91	.47	.44	0	1	1	
Japan	.61	.21	.41	-.3	89.1	.71	8.82
Sweden	.52	.13	.39	-.39	87.34	.92	48.46
Germany	.45	.29	.16	-.46	38.9	.83	24.46
Canada	.32	.27	.05	-.59	34.71	.88	45.55
Singapore	.25	.43	-.18	-.66	5.95		
Britain	.2	.26	-.05	-.71	30.46	.94	107.81
Mexico	.17	.4	-.23	-.74	9.51	.73	23.04
N. Ireland	.16	.58	-.42	-.75	-15.18		
Australia	.05	.21	-.16	-.86	30.65	.83	45.24
Italy	0	.12	-.12	-.91	38.96	.82	45.4
Portugal	-.04	.37	-.41	-.95	10.55	.66	23.04
Poland	-.07	.14	-.21	-.98	33.89	.8	44.74
France	-.11	.11	-.22	-1.02	36.08	.84	58.87
Colombia	-.12	.37	-.48	-1.03	10.25	.52	15.69
NZ	-.14	.27	-.42	-1.05	18.68	.79	43.54

Source: Management as a Technology by Bloom, Sadun and van Reenen (2015)

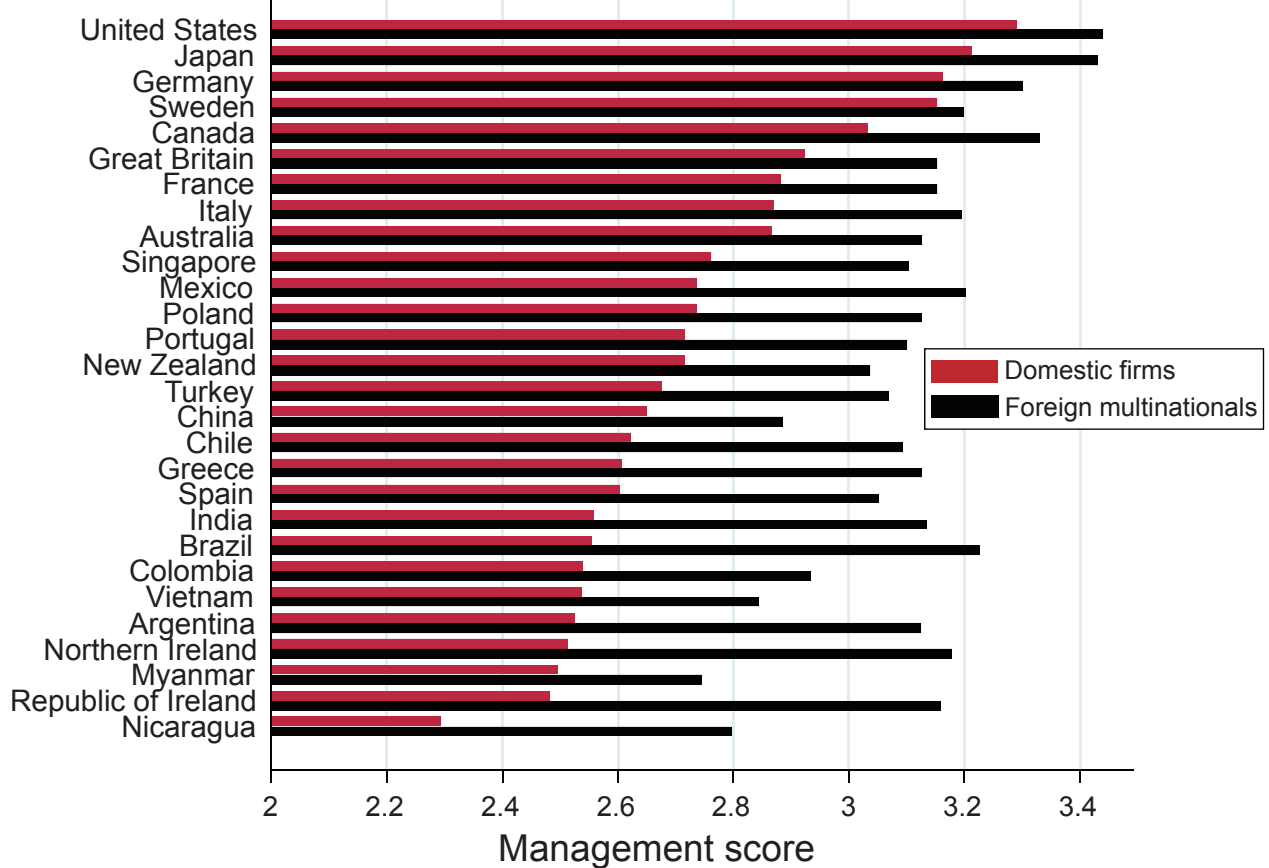
1) Measuring management and its impact on GDP

2) Impact of management on performance

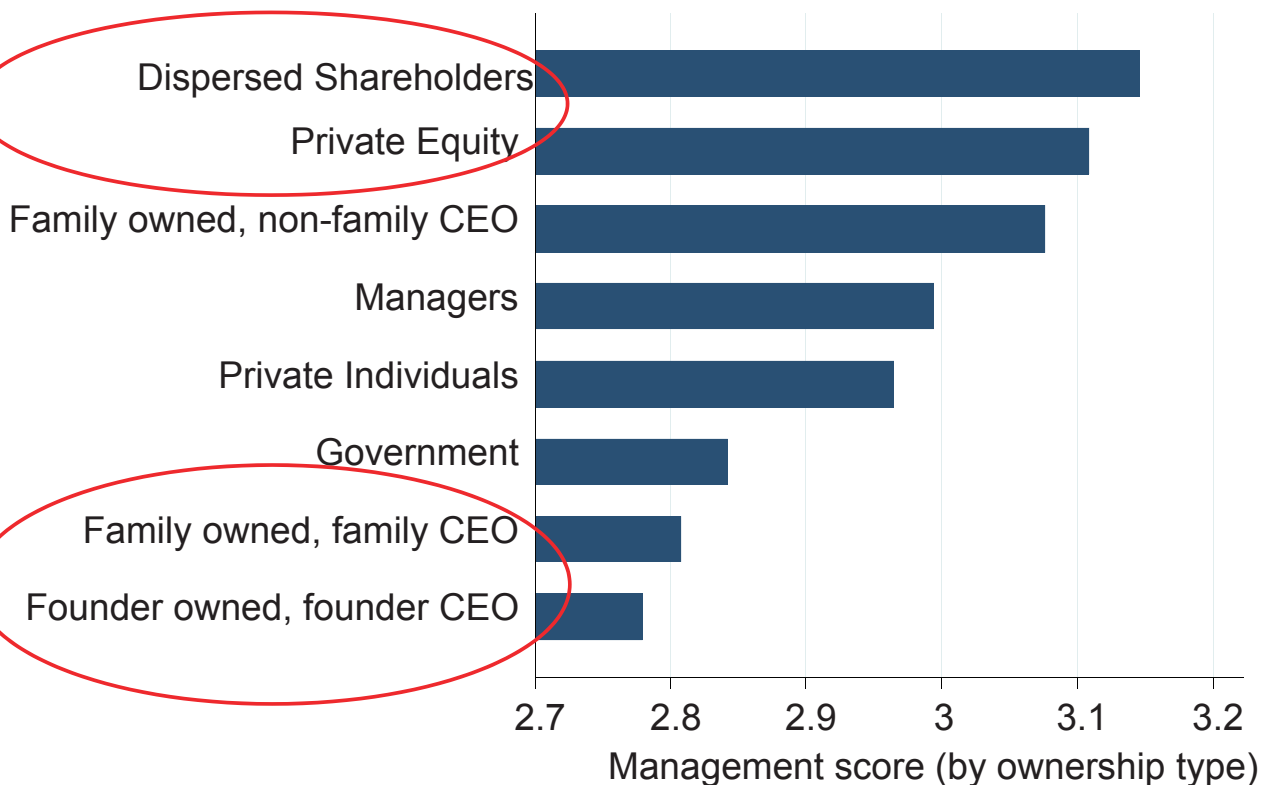
- Regression results
- Field experiments

3) Drivers and policy – how can we raise growth?

PROMOTE FDI: MULTINATIONALS ACHIEVE GOOD MANAGEMENT PRACTICES WHEREVER THEY LOCATE

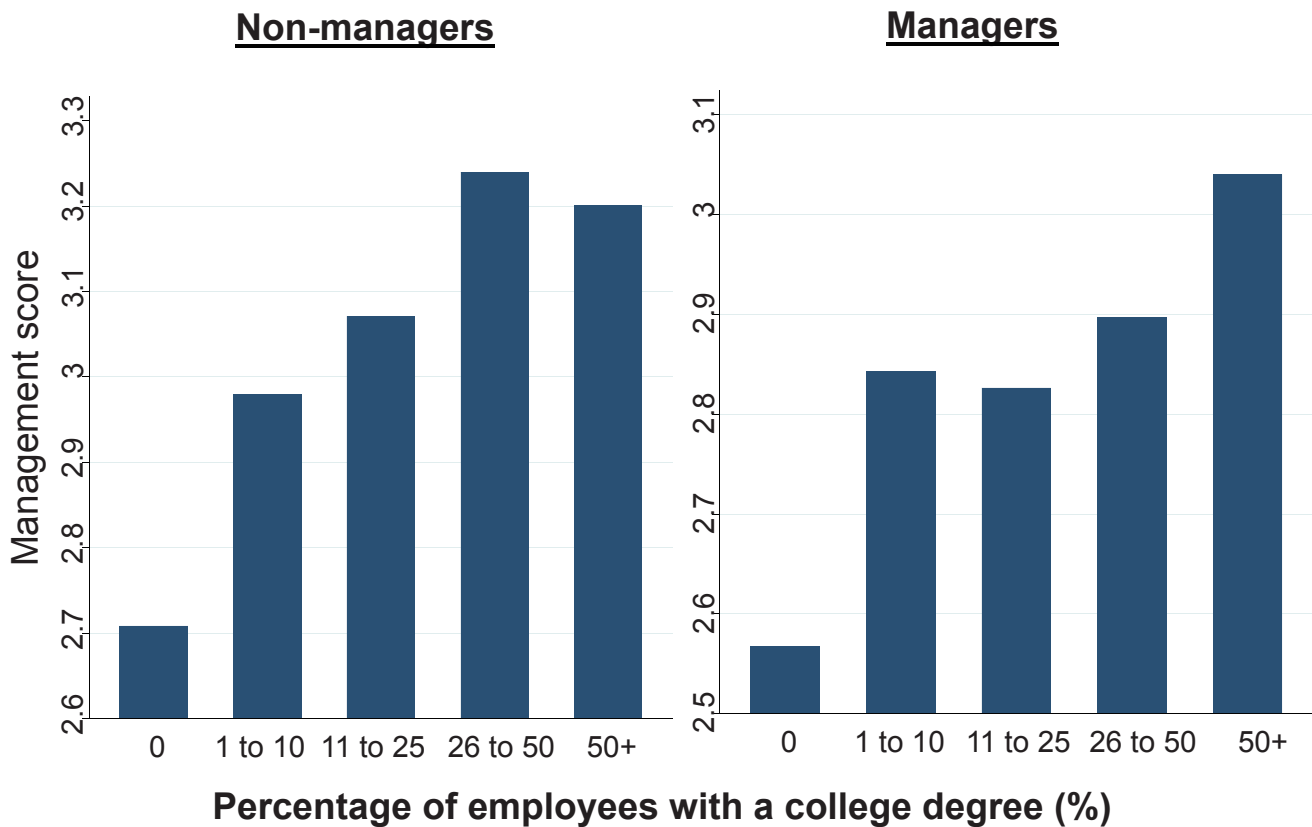


PROMOTE PROFESSIONAL OWNERSHIP: FAMILY-RUN AND GOVERNMENT FIRMS OFTEN HAVE POOR MANAGEMENT



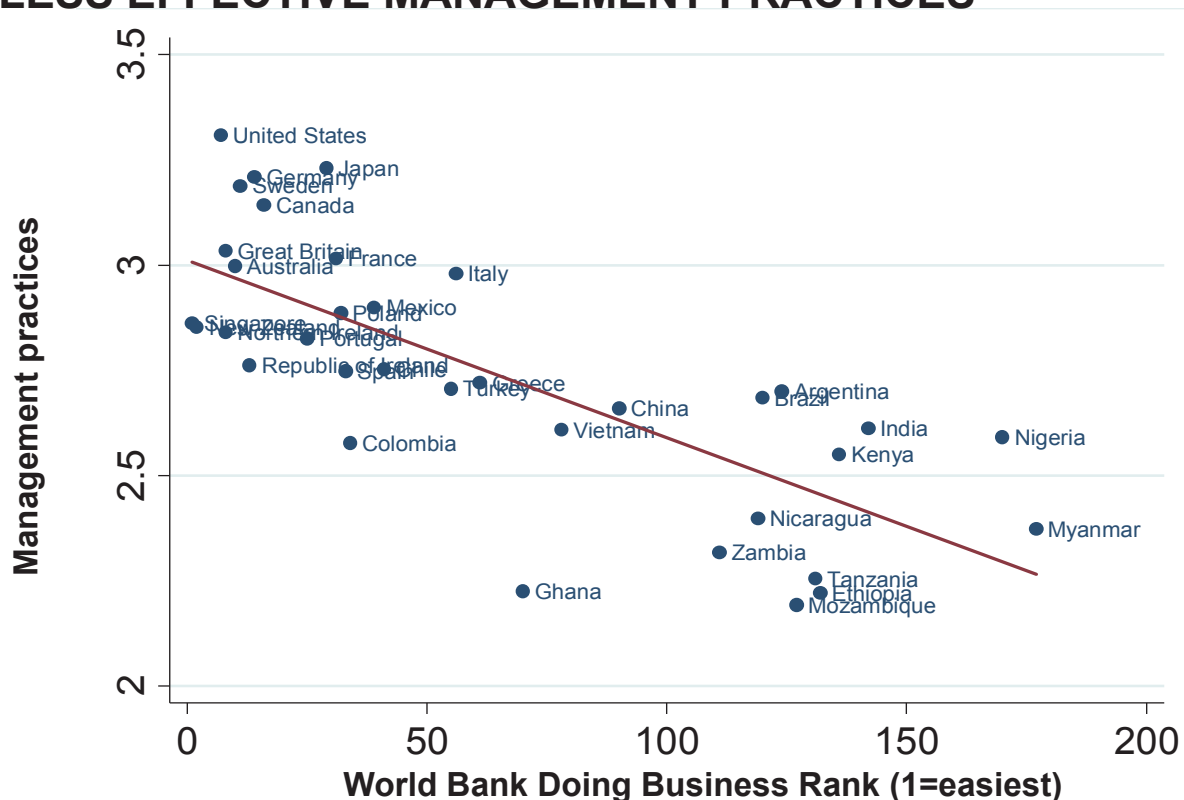
Management scores after controlling for country, industry and number of employees. Data from 9085 manufacturers and 658 retailers. "Founder owned, founder CEO" firms are those still owned and managed by their founders. "Family firms" are those owned by descendants of the founder. "Dispersed shareholder" firms are those with no shareholder with more than 25% of equity, such as widely held public firms.

RAISE EDUCATION FOR NON-MANAGERS AND MANAGERS APPEAR LINKED TO BETTER MANAGEMENT



Sample of 8,032 manufacturing and 647 retail firms.

MINIMIZE REGULATIONS: THESE ARE CORRELATED WITH LESS EFFECTIVE MANAGEMENT PRACTICES



Note: Management scores for the 15,454 interviews in the WMS survey plotted against the World Bank's 2014 doing business "Ease of Doing Business" rank, where 1 is best and 189 is worst. See <http://www.doingbusiness.org/rankings>. Smaller and larger firms in China, Nigeria and Mozambique have been re-stratified in order to balance the sampling frame.

Conclusions

Management appears to be a major driver of growth

Policies to follow in particular in Japan would be:

- Encouraging multinationals
- Less regulation

Policies to follow in particular in the US would be:

- Improved education
- Less regulation

More research, policy briefs & media available here
www.worldmanagementsurvey.com

The screenshot shows the homepage of the World Management Survey (WMS). At the top left is the WMS logo, which includes a globe icon and the text 'WMS WORLD MANAGEMENT SURVEY'. To the right of the logo is a navigation menu with links: 'ACADEMIC', 'POLICY & BUSINESS', 'TEACHING', 'SURVEY DATA', 'MEDIA', and 'ABOUT US'. A search icon is located to the right of the menu. The main content area features four histograms showing the distribution of 'AVERAGE MANAGEMENT' scores for the United States, Brazil, China, and India. The y-axis for these histograms is labeled 'DENSITY' and ranges from 0 to 1.5. The x-axis is labeled 'AVERAGE MANAGEMENT' and ranges from 1 to 5. To the right of these histograms is a large blue heading 'RESEARCH' followed by the text: 'We have worked with thousands of managers from nearly 40 countries to measure performance in their firms.' Below this text is a 'BENCHMARK NOW' button. At the bottom left, there is a section titled 'LATEST NEWS' with a sub-heading 'DATE FOR YOUR CALENDARS: NEXT EMPIRICAL MANAGEMENT CONFERENCE AT MIT ON DECEMBER 8-9, CALL FOR PAPERS COMING IN JULY.' and another sub-heading 'NEW PAPER: INTERNATIONAL DATA ON MEASURING MANAGEMENT PRACTICES'. At the bottom right, there is a section titled 'Survey Data' with a gear icon.

Growth Strategy of Japan 2017:

The Invisible Third Arrow Needs a New Bow

Takatoshi Ito

Professor, School of International and Public Affairs,
Columbia University

JEF-APARC conference at Stanford

June 2, 2017

Takeaways

- Japanese economy as of March (Q1), 2017,
 - The real side of the economy is doing well
 - But, the inflation rate is far below the 2% target
- Challenges
 - Fiscal. High fiscal deficits and debt-to-GDP ratio (240%)
 - Real wages. w are not rising even at $\pi < 3\%$ \rightarrow C is weak
 - Demography \rightarrow Adverse, aggregate supply and demand
 - Need higher productivity & potential growth (3rd arrow)
- 3rd Arrow (Need Higher productivity and compensations)
 - Need globally competitive workers \leftarrow English proficiency & IT skills
 \leftarrow Education reform \leftarrow Labor reform
 - Need better allocation of Capital \leftarrow Corporate gov reform & pension fund reform
 - Need more FTAs \leftarrow agricultural reform \leftarrow Introduce market mechanism
 - Need medical and health care \leftarrow Medical reform

Japanese Economy

The real side is doing well

- Japanese economy as of March (Q1), 2017,
 - Growing at or above potential ($g(2017Q1)=2.2\%$)
 - Full employment ($u=2.8\%$)
 - But, inflation rate is still near 0% ($\pi=0.2\%$)
 - Nominal wage increase is around 2% or above ($\Delta w=2\%$)
 - Working age pop declining 1% a year ($\Delta L=-1\%$)
 - Women and elderly participation rates increasing
 - Women participation rate (all ages): now Japan>US

2017/06/02

(c) Takatoshi Ito -- Columbia U

3

Japanese Economy

Challenges

- QQE is reaching at its limit and no inflationary sign
 - Exit problem
- High fiscal deficits and debt-to-GDP ratio (240%)
 - GDP(2016): 537 trillion yen
 - New JGB issues (2017 budget): 34.4 trillion (6.4%)
 - General Gov liability (2015): 1,296 trillion (241%)
- Real wages are not rising even at $\pi<3\%$ → C is weak
- Demographic transition → I is weak
- Need higher productivity & potential growth (3rd arrow)

2017/06/02

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Need Growth Strategy: Higher productivity & wages

- Need globally competitive workers
 - ← English proficiency & IT skills
 - ← Education reform
 - ← Labor reform
- Need better allocation of Capital
 - ← Corporate gov reform & pension fund reform
- Need more FTAs
 - ← agricultural reform
 - ← Introduce market mechanism
- Need better medical & health care
 - ← medical reform

2017/06/02

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Reforms: Why, How and Consequences

- Human capital with English proficiency
- IT-skilled workers
- Education reform for experts
- Labor reform
 - Flexible hiring and firing
- Capital allocation
 - Corporate gov reform & pension fund reform
- FTAs and Agriculture
 - Introduce market mechanism
- Medical & health care

2017/06/02

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6

Debt and Economic Growth

Keiichiro Kobayashi

Keio University, CIGS, RIETI, Tokyo Foundation

June 2, 2017 @ JEF-APRC, Stanford 2017

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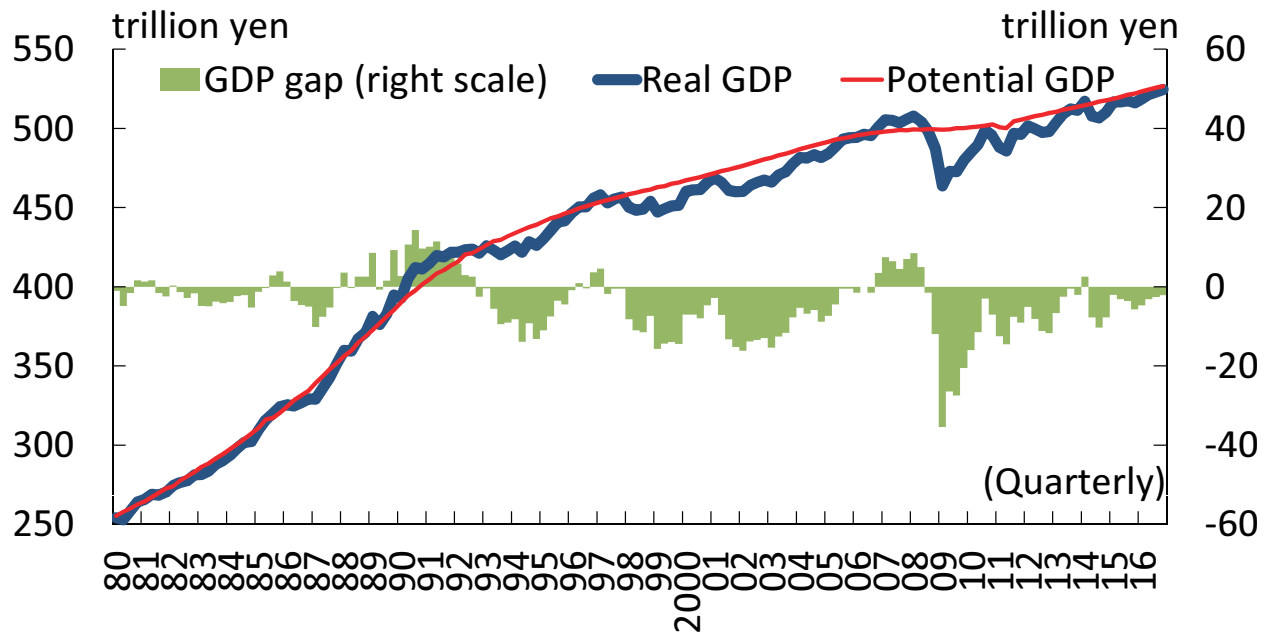
Japan

- 1980s High economic growth (Boom): Asset bubbles
- 1990s Low economic growth (Stagnation): Nonperforming loans
- 2000s Low economic growth (Stagnation): Public debt

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“Secular stagnation” in Japan

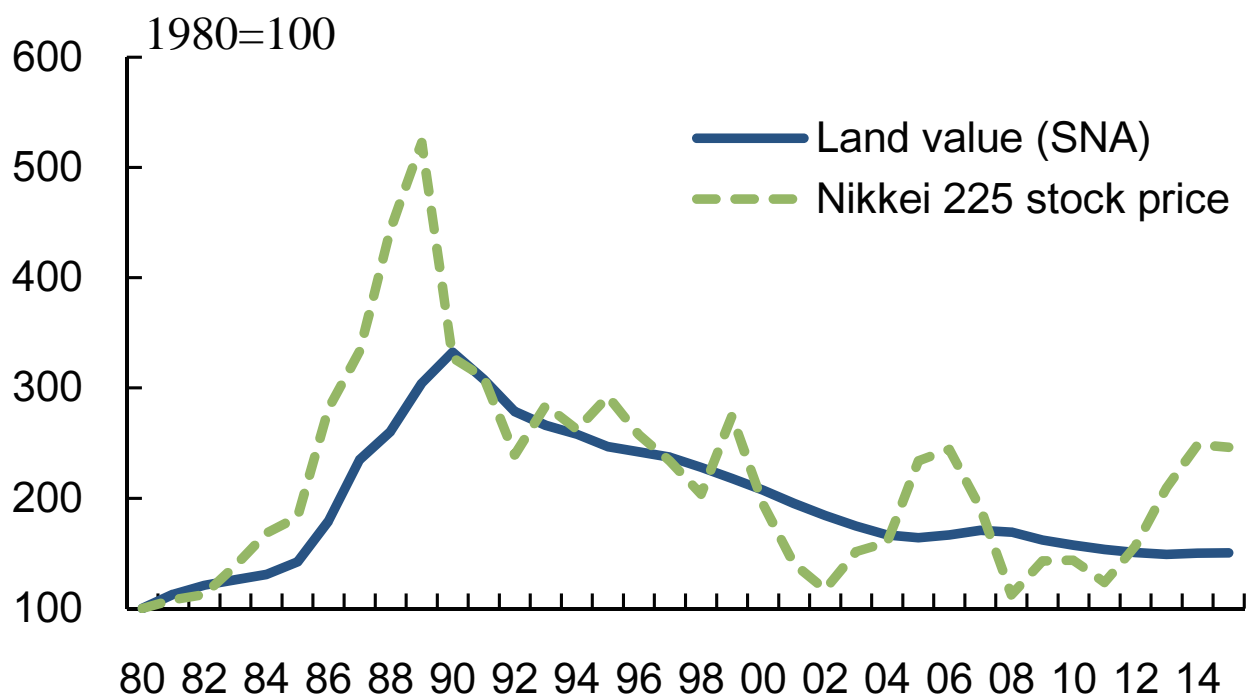
Real and potential GDP



Sources: Cabinet Office, Government of Japan, “Annual Report on National Accounts”

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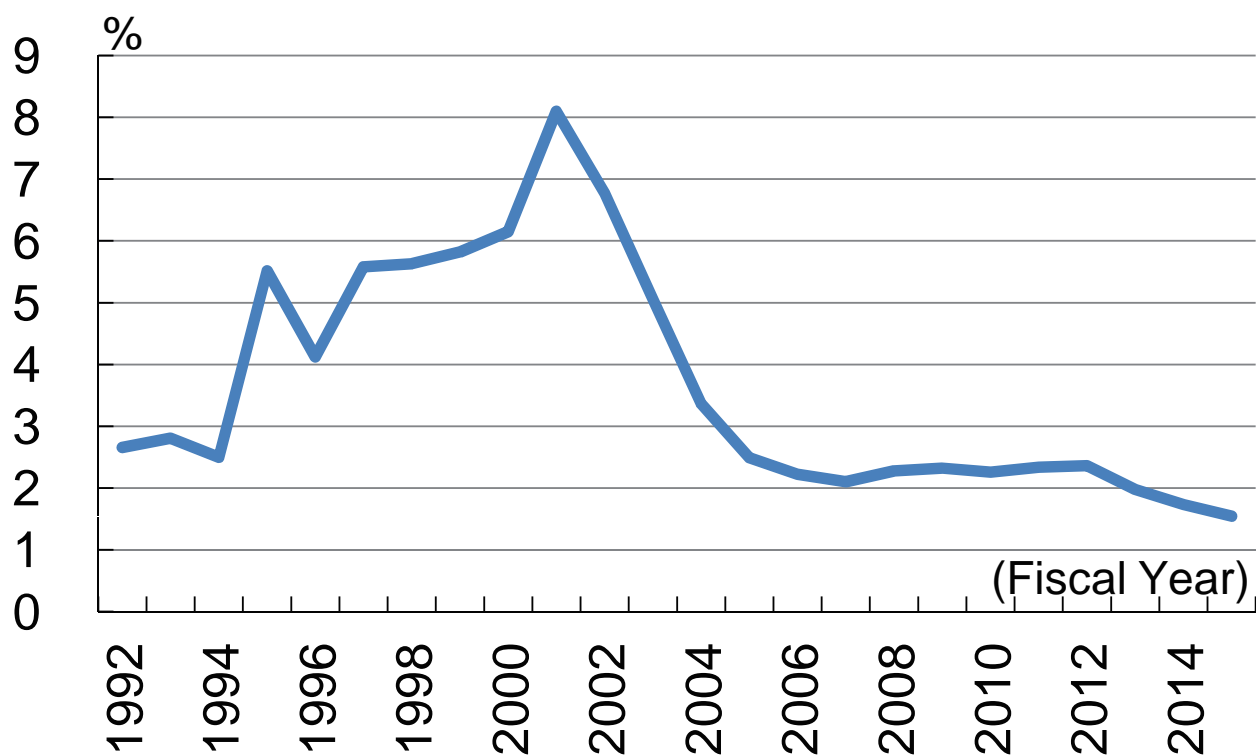
Asset prices: land and stocks



Sources: Cabinet Office, Government of Japan, “Annual Report on National Accounts”, The Nikkei.

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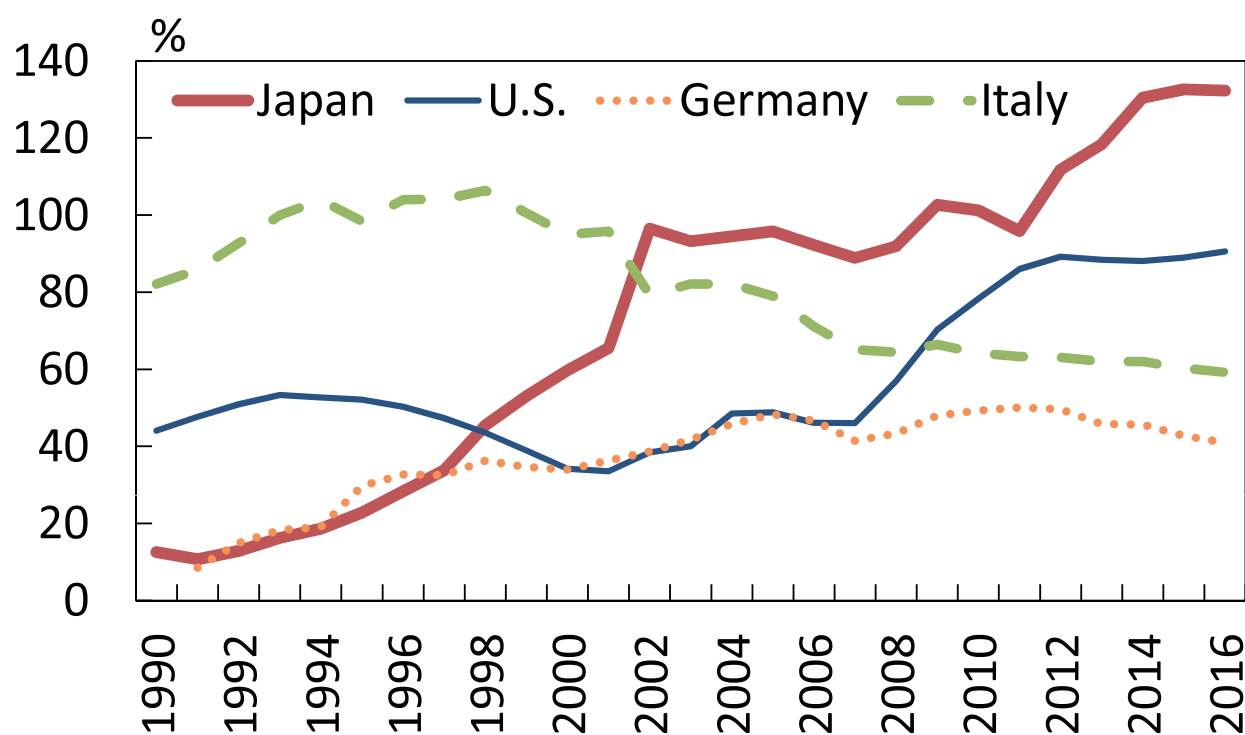
Nonperforming loans-to-GDP ratio



Sources: Financial Services Agency, *Status of Non-Performing Loans*; Cabinet Office, Government of Japan, *Annual Report on National Accounts*.

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Public debt



Source: OECD, *Economic Outlook No.100*

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Does excessive debt depress the economy persistently?

- Debt in private sector
- Borrowing constraints on inter-temporal debt b and intra-temporal debt σ , which finances the working capital

- $b \leq \theta S$

Kiyotaki-Moore 1997

Temporary effect

- $\sigma \leq \theta \max \{S - b, 0\}$

Jermann-Quadrini 2012

Temporary effect

- $\sigma \leq \phi y(\sigma) + \max \{\theta S - b, 0\}$

Kobayashi-Shirai 2017

Permanent effect

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Why does excessive debt have a permanent effect?

- Borrowing constraints : $\sigma \leq \phi y(\sigma) + \max \{\theta S - b, 0\}$

- Define σ_z by $\sigma_z = \phi y(\sigma_z)$

- Define b_z by $b_z = \frac{y(\sigma_z) - \sigma_z}{r}$

- Suppose $b_z > \theta S$

- If $b_0 = b_z$, then for all t ,

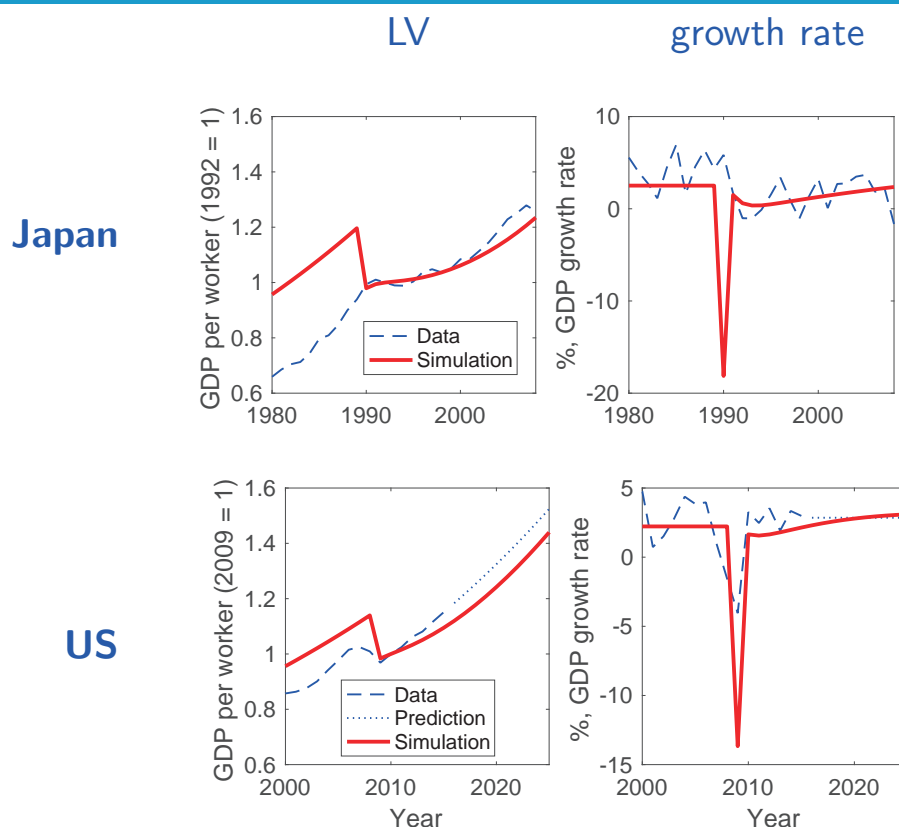
$$b_t = b_z,$$

$$\sigma_t = \sigma_z$$

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Debt in private sector can cause secular stagnation: simulation

Kobayashi and Shirai (2017)



Policy implication for excessive debt in private sector

- Private-sector debt may cause persistent stagnation
 - Japan 1990s
 - United States 2010s?
- Debt reduction may enhance economic growth
 - Corporate or household debt
 - Bank recapitalization and write-off of nonperforming loans
 - Debt forgiveness and restructuring of the borrowers

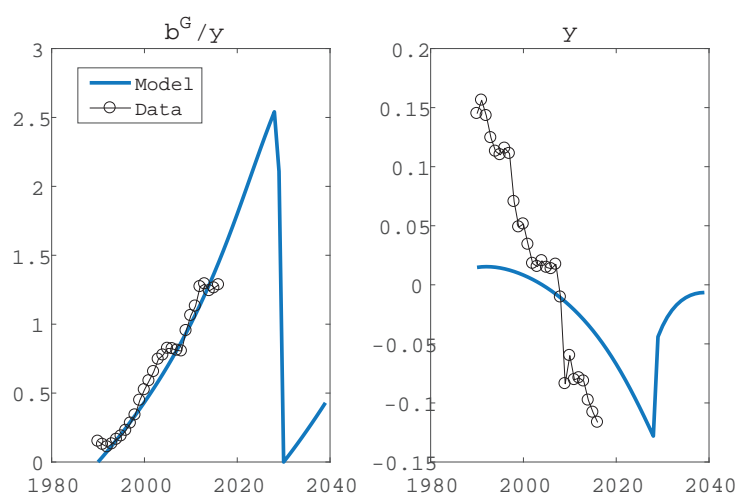
Tail risk of public debt

- Nonperforming loans disappeared in 2000s in Japan
- Public debt is exploding in 2010s
- Tail risk depresses the economy persistently
 - Gourio (2013)
 - Kozlowsky-Veldkamp-Venkateswaran (2015)
- Tail risk for Japan = Debt crisis = Hyperinflation
 - Persistent stagnation **today** may be caused by **future** risk of tail event
 - Tail risk is “growing”
 - ⇒ Not only *level* but also *growth rate* of GDP is depressed

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Simulation and data (Japan)

- Kobayashi and Ueda (work in progress)



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Inter-generational conflict on public debt

- Public-sector debt may cause persistent stagnation
 - Japan 2010?
- Fiscal consolidation = Inter-generational investment
 - Current generation pays the **cost** of investment, i.e., higher tax
 - Future generation enjoys the **return**, i.e., economic stability
- Non-existence of democratic implementation of fiscal consolidation
 - Future generation cannot commit to pay reward of fiscal consolidation to Current generation
 - Current generation has no incentive to implement fiscal consolidation
- Need political system reform
 - To create political actors that represent future generation
 - Independent fiscal agency

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Reference

- Kobayashi and Shirai (2017) “Debt-ridden borrowers and economic slowdown”
- Kobayashi (2017) “Persistent economic slowdown and debt-ridden borrowers” *VOX column*
<http://voxeu.org/article/persistent-economic-slowdown-and-debt-ridden-borrowers>

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Globalization and Inequality

June 2017
Hideichi Okada

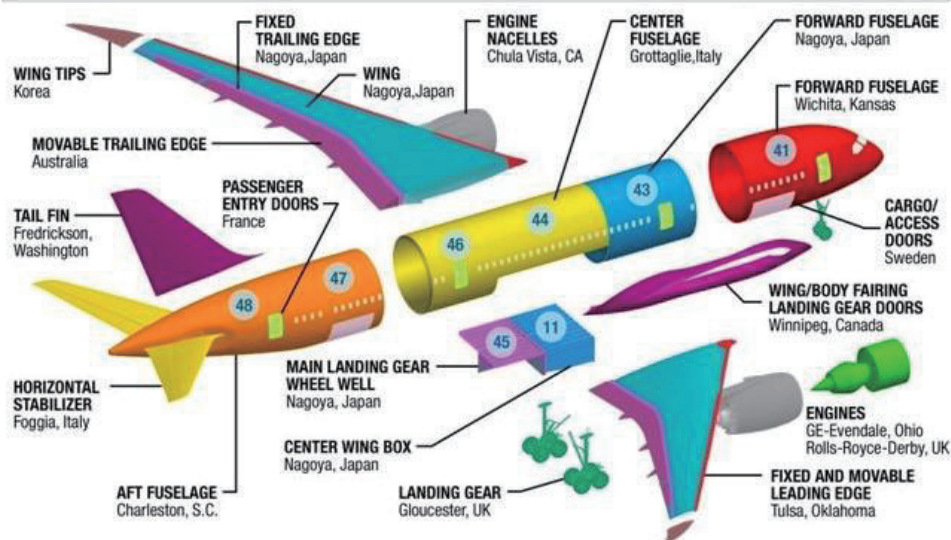
Location and Number of iPhone 6 Suppliers per Country

Number of suppliers	Country	Number of suppliers	Country	Number of suppliers	Country
349	China	11	Vietnam	2	Brazil
139	Japan	7	Mexico	2	Costa Rica
60	USA	6	Indonesia	2	Austria
42	Taiwan	6	Israel	2	Netherlands
32	South Korea	5	France	1	Canada
21	Malaysia	5	Czech Republic	1	Portugal
24	Philippines	3	Belgium	1	Spain
21	Thailand	3	Italy	1	Morocco
17	Singapore	3	Ireland	1	Puerto Rico
13	Germany	3	UK	1	Malta
				1	Hungary

Boeing 787 Suppliers per Country

THE COMPANIES

U.S.	CANADA	AUSTRALIA	JAPAN	KOREA	EUROPE
Boeing	Boeing	Boeing	Kawasaki	KAL-ASD	Messier-Dowty
Spirit	Messier-Dowty		Mitsubishi		Rolls-Royce
Vought			Fuji		Latecoere
GE					Alenia
Goodrich					Saab



Source: Boeing

2

Boeing 787 Suppliers per Country

Part name	Country
Forward Fuselage	USA
Forward Fuselage	Japan
Center Fuselage	Italy
Aft Fuselage	USA
Wings	Japan
Leading Edge of Wings	USA
Fixed Trailing Edge of Wings	Japan
Movable Trailing Edge of Wings	Australia
Wing Tips	Korea
Vertical Tail Fin	USA
Rudder	China
Horizontal Stabilizer	Italy
Fairing Landing Gear Doors	Canada
Cargo/Access Doors	Sweden
Passenger Entry Doors	France
Landing Gear	UK
Engines	USA/UK
Engine Nacells	USA

Source: Boeing

3

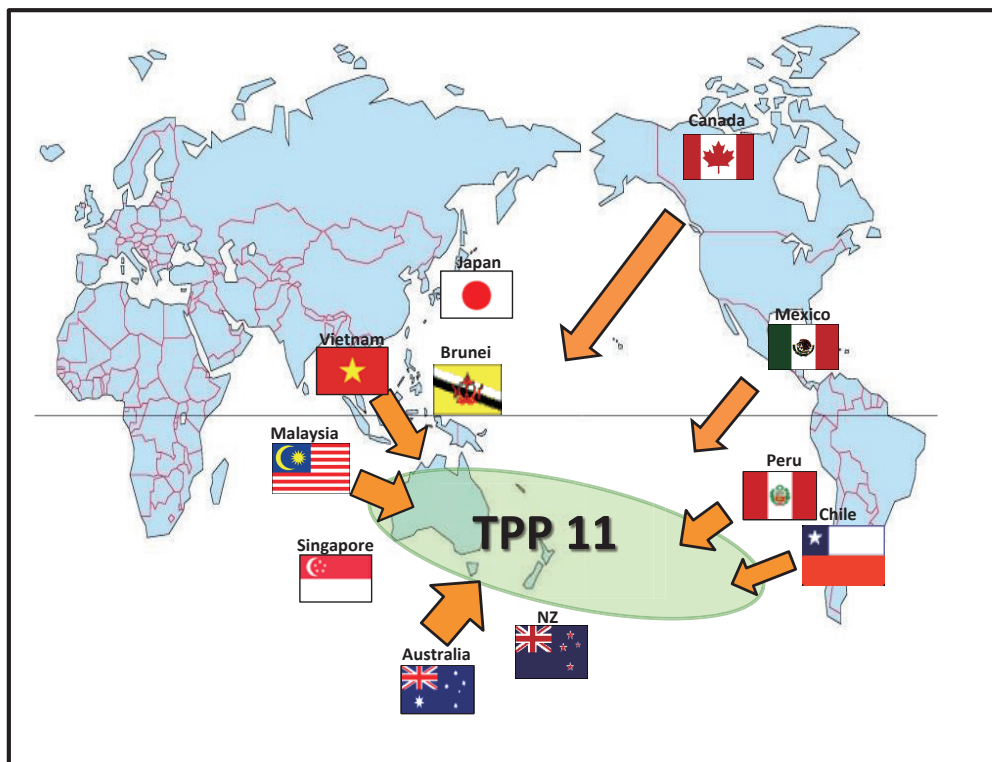
Number of FTAs in the World (As of December 2016)

Status	Number
In Effect	286
Agreed but not Ratified	18
In Negotiation	79
In Preparation	22

Source: JETRO

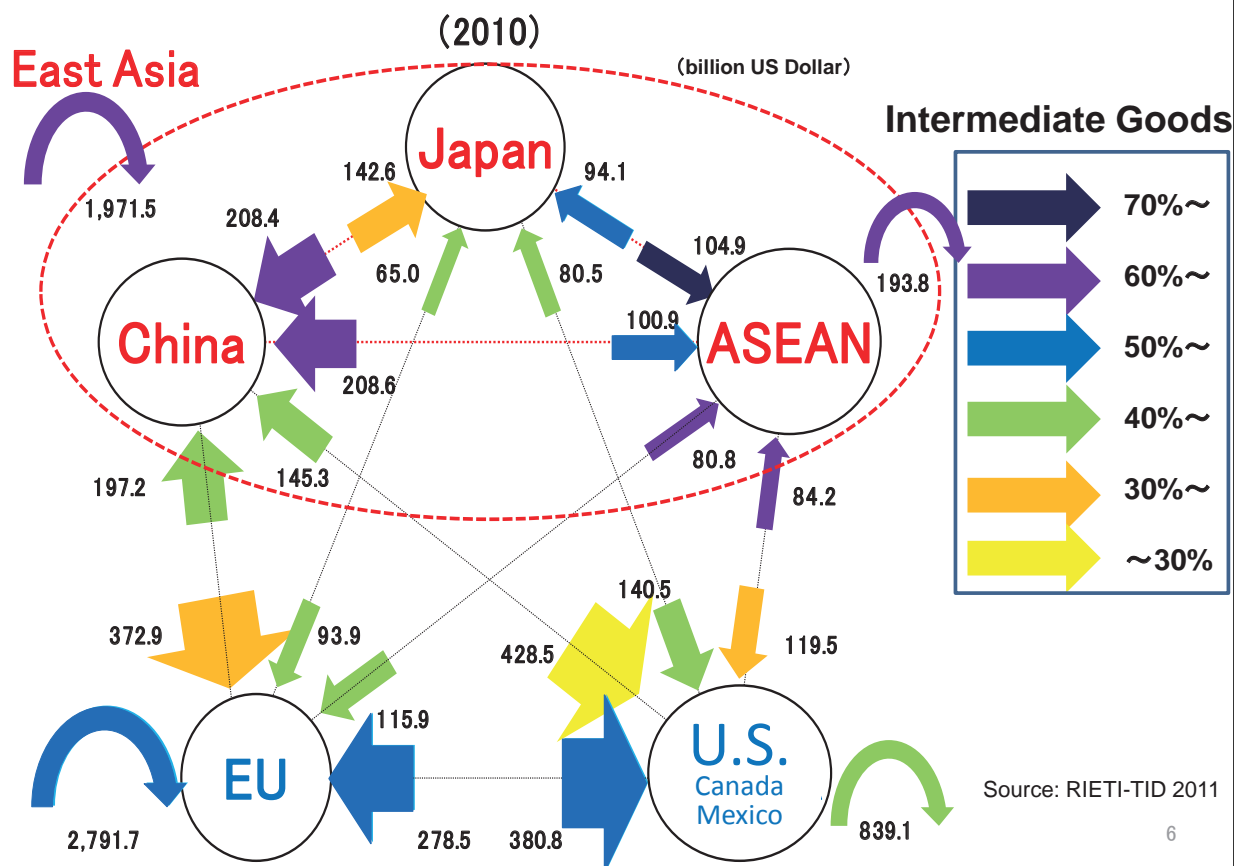
4

TPP 11



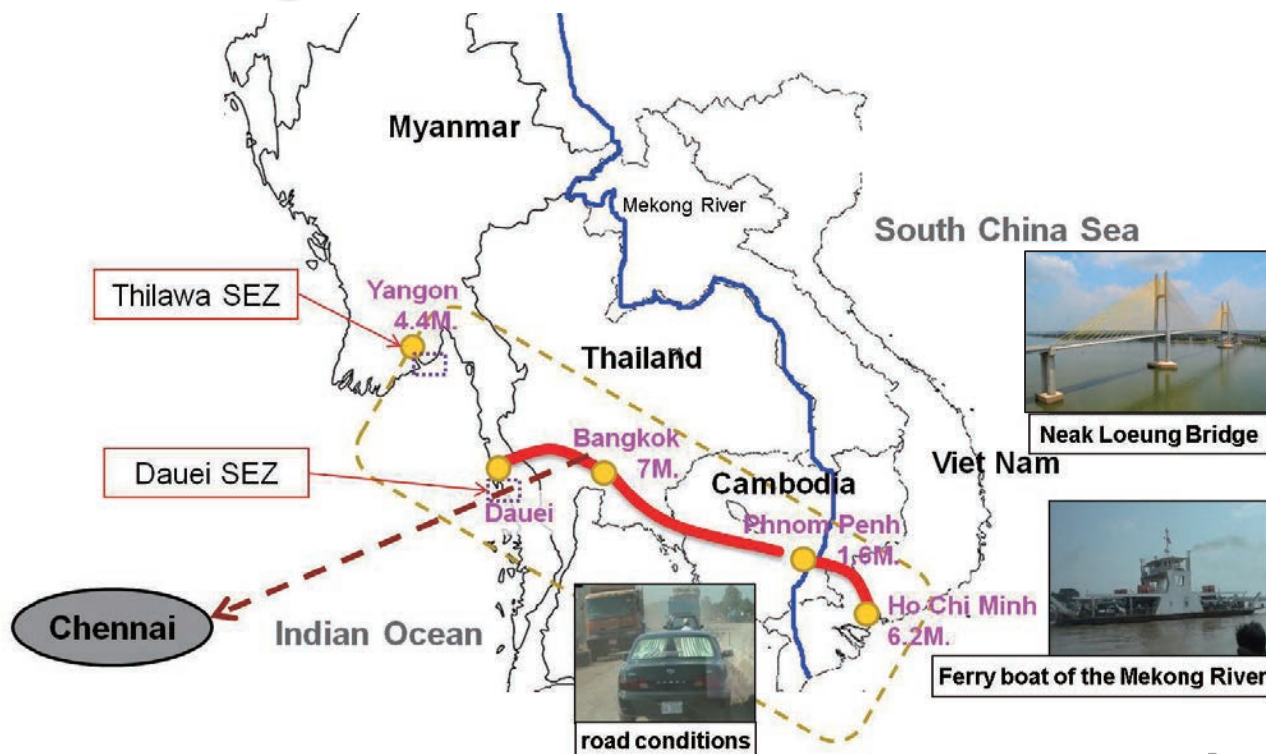
5

Supply Chain in East Asia



6

Southern Industrial Corridor in Mekong



7

NAFTA Super Corridor





➤ State of Guanajuato
«Detroit in Mexico»






➤ Many auto
manufacturers
invested in Mexico

GM 690,000
Ford 430,000
Fiat Chrysler 500,000
Nissan 820,000
Honda 200,000
Mazda 180,000
Toyota 100,000
VW 460,000
BMW (150,000)
Audi —
Auto Parts Suppliers ⁸

Fast Food



	Founded	Number of Countries	Number of Stores
MacDonald's 	1940	120	36,900
Starbucks 	1971	46	23,800

Fast Fashion

	Country	Founded	Number of Countries	Number of Stores
GAP 	USA	1969	54	3,800
ZARA 	Spain	1975	87	2,000
H & M 	Sweden	1947	62	4,000
Forever 21 	USA	1984	60	800
Uniqlo 	Japan	1974	12	1,300

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Uber and Airbnb

	Founded	Number of Countries	Number of Cities
Uber 	2009	70	450
Airbnb 	2008	192	3,300

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Globalization & Inequality

Manufacturing Industry

- Utilization of cheap labors in developing countries (e.g. Bangladesh)
 - Depriving developed countries of blue-collar worker's jobs
 - + Creating profit for design and management

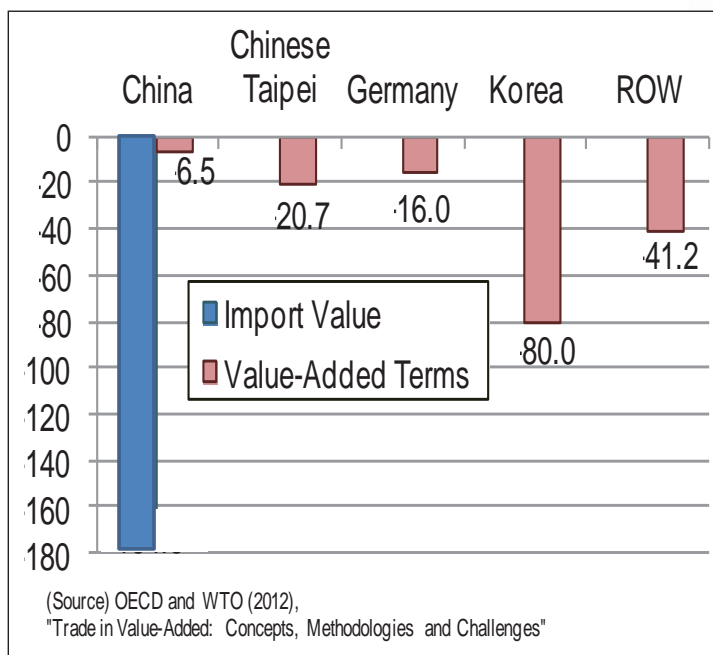
Service Industry

- Oligopolization of the service industry in indigenous/local markets
 - Depriving indigenous/local merchants of business opportunities
 - + Creating new business models and opportunities/value

12

Trade of iPhone in Value-Added Terms

U.S. Imports of One Unit of iPhone



iPhone 4



©2012 Apple, Inc.

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Rise of Nationalism and Anti-Globalism

- America First
- Brexit
- Marine Le Pen in France
- Joko Widodo in Indonesia

cf. One Belt One Road

14

Future of Globalization

- Would globalization slow down because of the political pressure?
- Inclusive Growth

15



Agenda

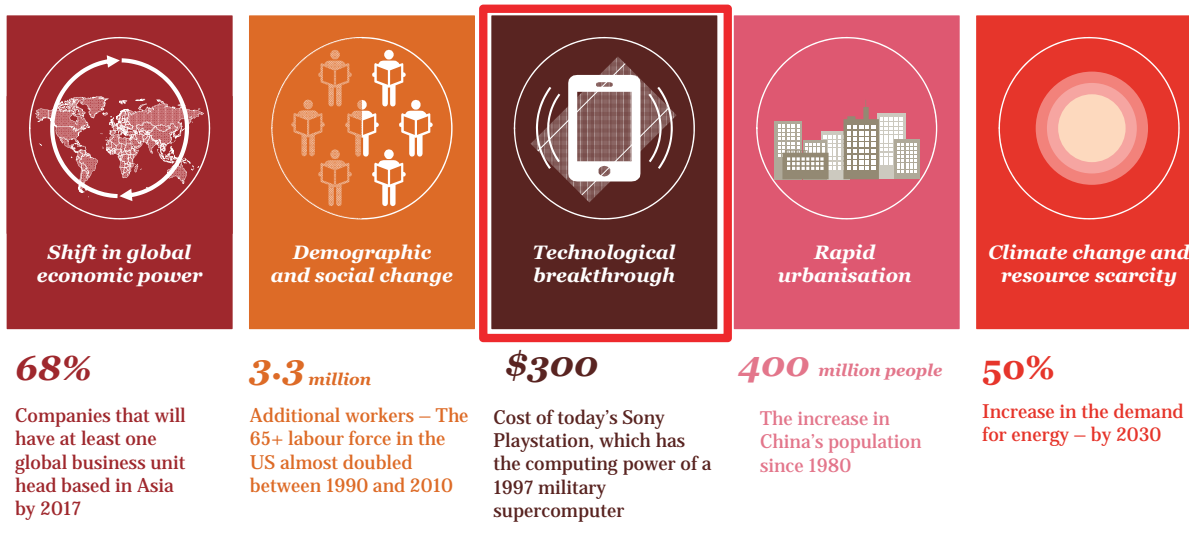
- 1. What's happening** ~ Five global megatrends and technological breakthrough
- 2. Highlights from PwC's 20th CEO Survey**
- 3. PwC Global FinTech Survey 2017**
- 4. Discussion points** ~ How business leaders are grappling with technological disruptions

Appendix

1

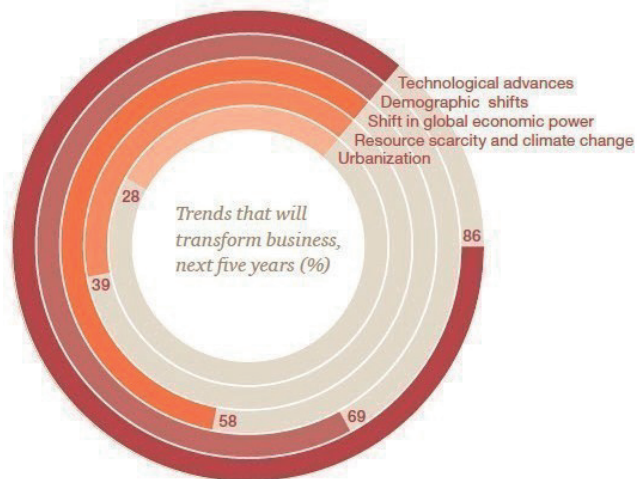
What's happening

Five global megatrends are fundamentally disrupting business...



Sources: The Economist: 2013 Asia Business Outlook Survey; ILO 'Key Indicators of the Labour Market'; Michio Kaku, 'Physics of the Future' (2011); Corbin Bal I Associates (2012); PwC analysis based on data from United Nations, Department of Economic and Social Affairs, Population Division (2013); 'Global Trends 2030: Alternative Worlds', National Intelligence Council, 2912.

Most CEOs believe that technology will transform and disrupt their business.



86%

of US CEOs say technological advances will transform their business over the next five years

Source : PwC 17th CEO Survey

5



Over the last 20 years, CEOs have witnessed tremendous upheavals as a result of globalization and technology



In trade



- 4x trade flows
- 5x financial flows
- BRIC economies

In technology



- Exponential rise in global online traffic
- Google, Wikipedia, Facebook, Alibaba

In society



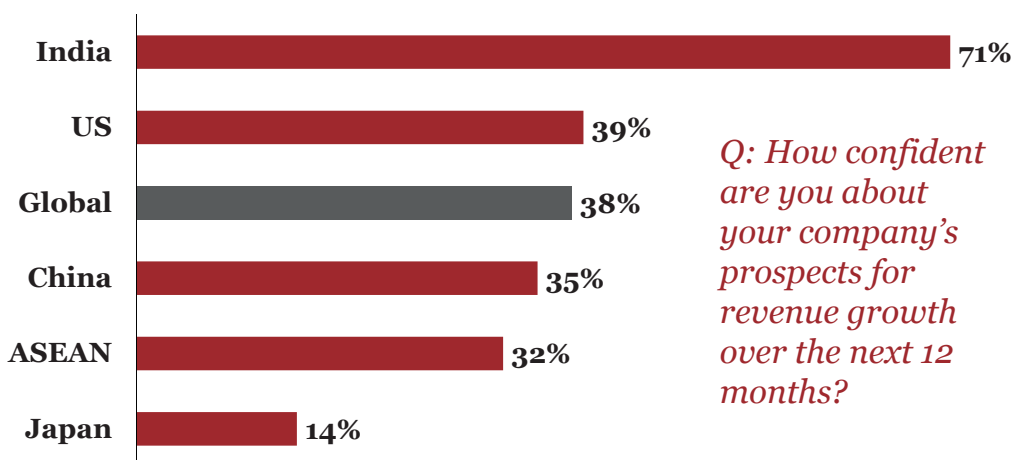
- Lifting 1 billion out of extreme poverty
- New emerging middle class

... however

- Inequality is on the rise
- Mistrust in business
- Growing social instability
- Rise in populism

Percentage of CEOs that were very confident about prospects for growth

The percentage of Indian CEOs that were very confident about near-term prospects for growth was the highest globally. In contrast, Japan was among the lowest – only ranking slightly higher than Venezuela.



Q: How confident are you about your company's prospects for revenue growth over the next 12 months?

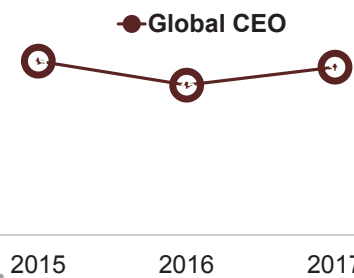
Uncertainty has become a way of life

CEO short-term confidence has risen compared to last year.

Question: How confident are you about your company's prospects for growth over the next 12 months?



38%
are "very confident"

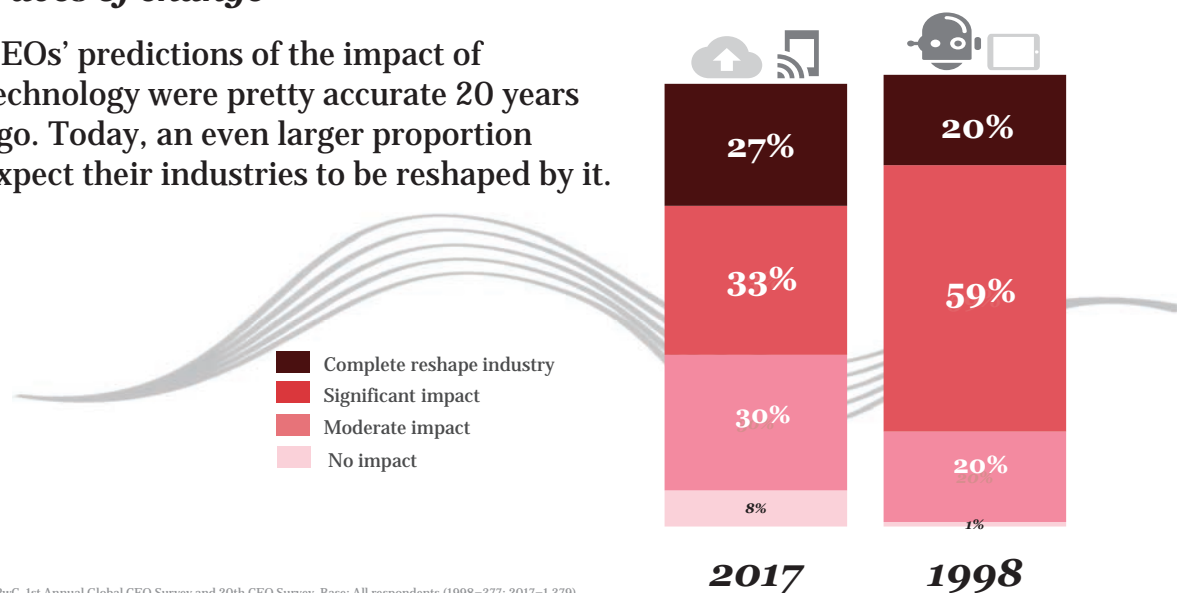


Source : PwC 20th CEO Survey
PwC

9

Waves of change

CEOs' predictions of the impact of technology were pretty accurate 20 years ago. Today, an even larger proportion expect their industries to be reshaped by it.



Source: PwC, 1st Annual Global CEO Survey and 20th CEO Survey. Base: All respondents (1998=377; 2017=1,379)
PwC

10

CEOs' digital literacy

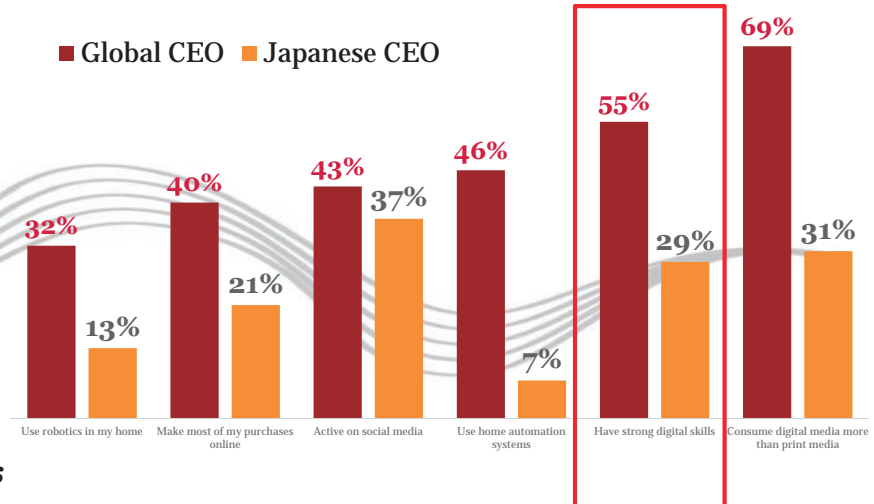
Is digital literacy a requisite for business leaders to create and lead our future?

29%

Of Japanese CEOs said that they have strong digital skills compared to

55% of Global CEOs

■ Global CEO ■ Japanese CEO



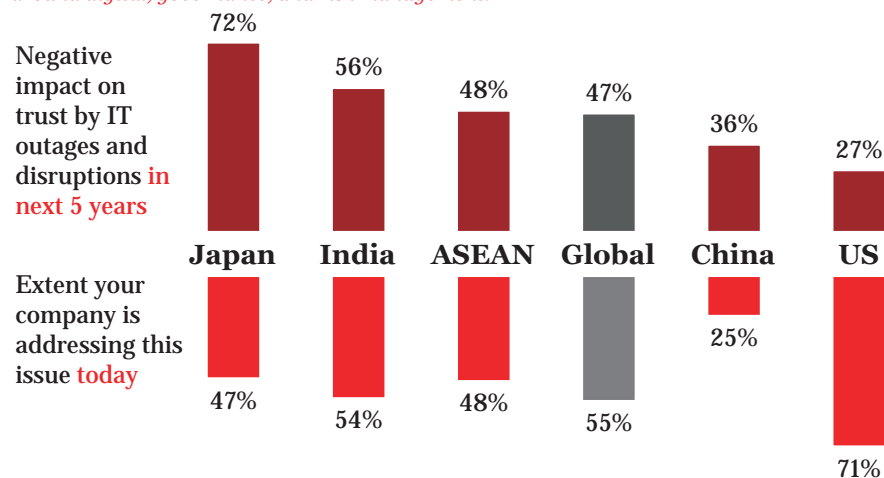
Source : PwC 20th CEO Survey
PwC

Question: To what extent do you agree or disagree with the following statements about your personal use of technology?

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Digital risks and trust in business

There is a striking contrast between Japanese and US CEOs on the approach to some of the risks around digital, governance, and risk management.



47%

of Japanese CEOs are addressing this issue today while
71% of US CEOs are already addressing it.

Source : PwC 20th CEO Survey
PwC

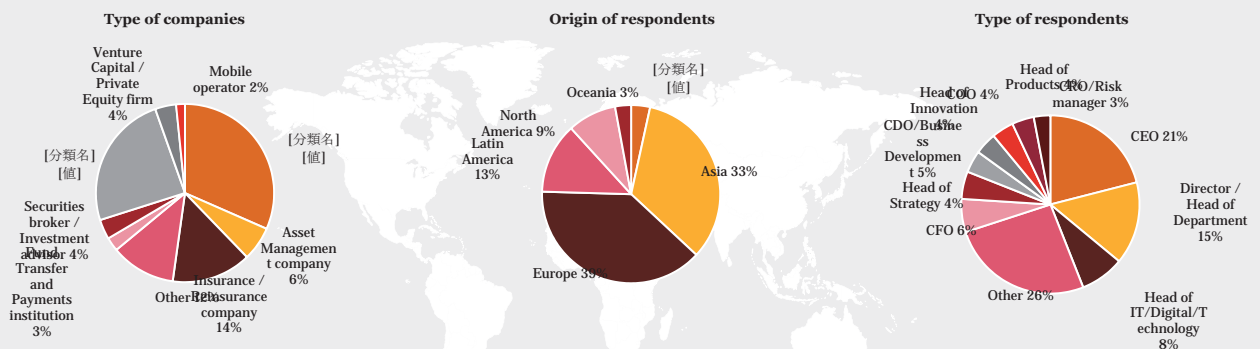
12



Global FinTech Survey 2017

Respondents profile

More than **1,300** respondents, from **71** different countries around the world



Source: PwC Global FinTech Survey 2017

14

FinTech is a driver of disruption in the market.

88% of incumbents are increasingly concerned they are losing revenue to innovators



Financial Institutions are learning to partner and integrate

82%

expect to increase FinTech partnerships in the next three to five years

Financial Institutions are embracing the disruptive nature of FinTech

56%

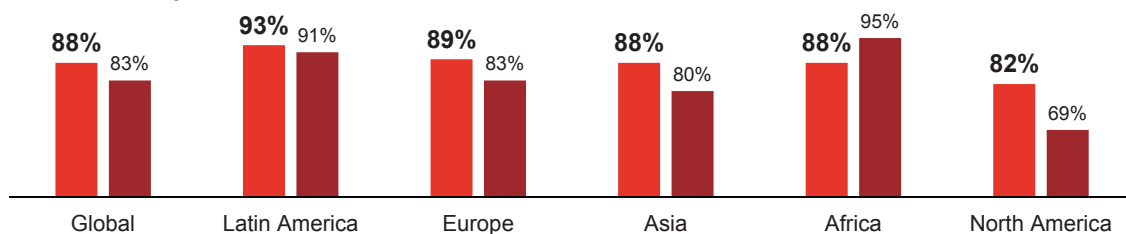
have put disruption at the heart of their strategy

Source: PwC Global FinTech Survey 2017

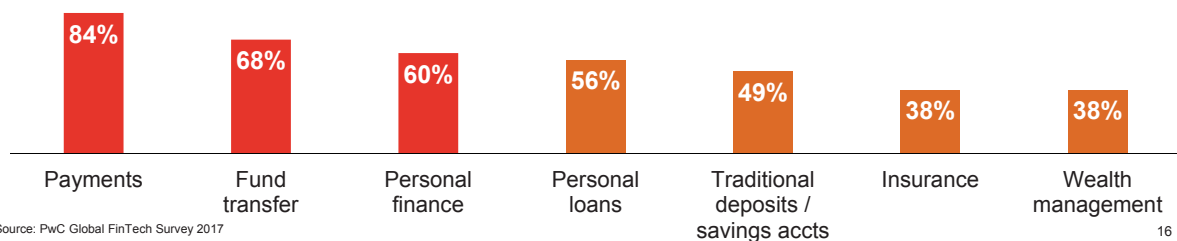
More than 80% of respondents believe their business is at risk

Q: Do you believe that part of your business is at risk of being lost to standalone FinTech companies within next 5 years?

■ 2017 survey ■ 2016



Q: What financial activities do you believe your customers already conduct with FinTech companies?

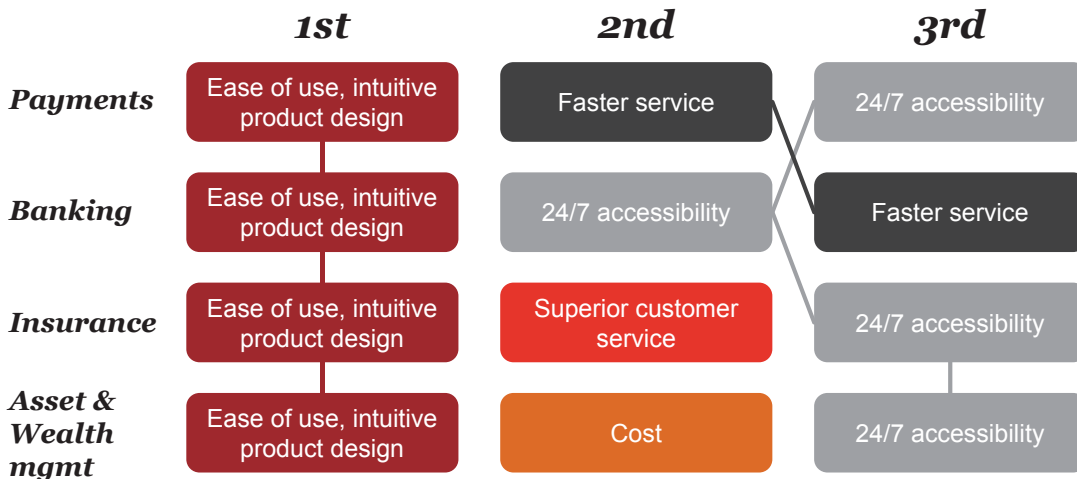


Source: PwC Global FinTech Survey 2017

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Financial institutions are addressing customer retention in the face of the disruptive nature of FinTech

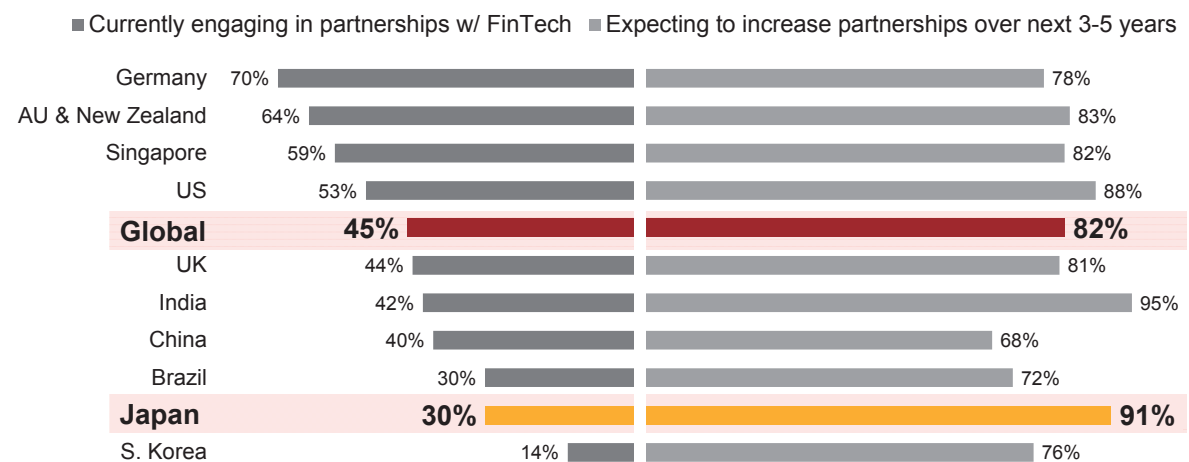
Q: What do you think are the most important areas to address customer retention in the context of new FinTech competition?



Source: PwC Global FinTech Survey 2017 17

Financial Institutions are learning to partner...

82% of companies expect to increase partnerships w/ FinTech in next 3-5 years

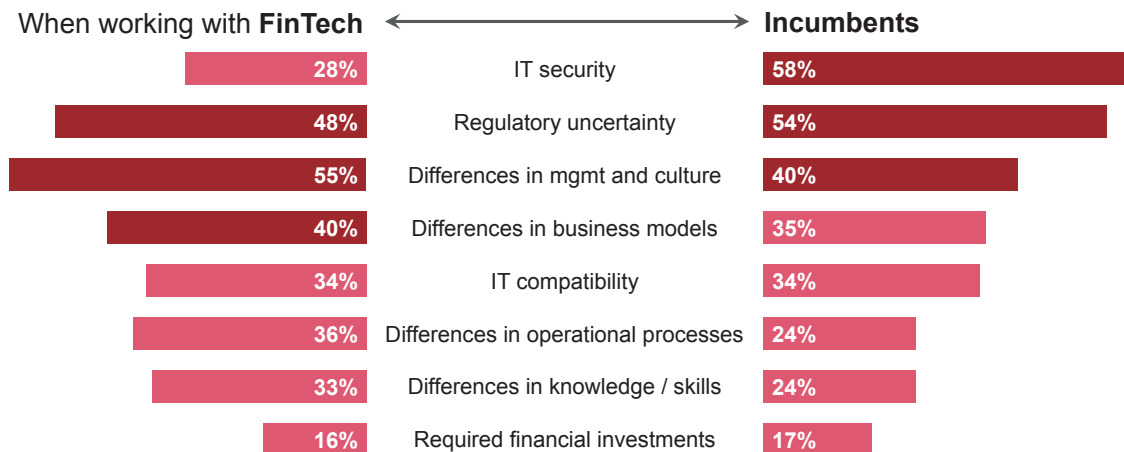


Source: PwC Global FinTech Survey 2017

18

And integrate... but facing challenges around security, regulatory uncertainty, differences in management, culture, business models

Q: When working with Financial Institutions (or FinTech companies), what challenges do you face?

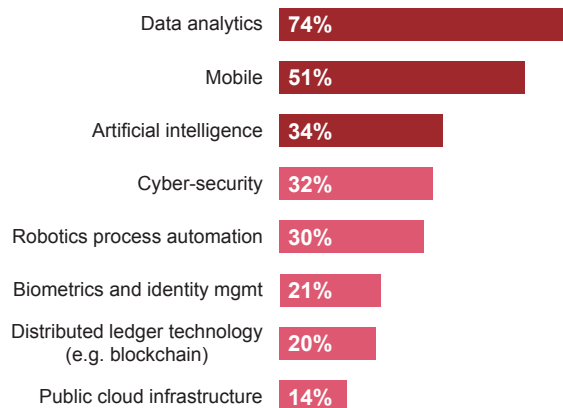


Source: PwC Global FinTech Survey 2017

19

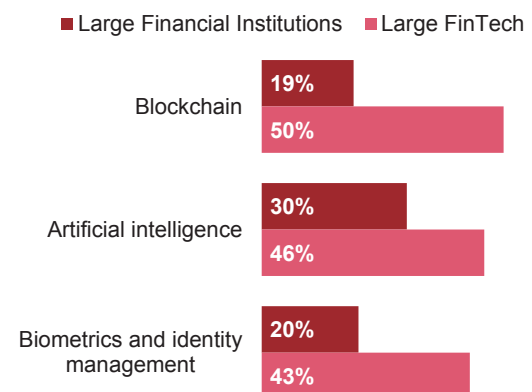
Investment in enabling technologies will help narrow the gap

Q: What are the most relevant technologies for your business that you plan to invest in within the next 12 months?



Source: PwC Global FinTech Survey 2017

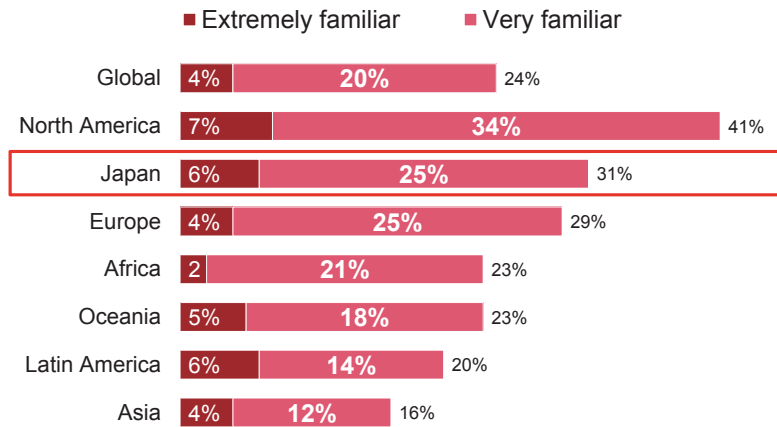
% of large Financial Institutions that identified these emerging technologies as the most relevant to invest in within the next 12 months (vs. Large FinTech companies)



Note: We include only responses of companies with more than 500 employees 20

Blockchain is moving out of the lab

Q: Please describe the extent to which you are familiar with blockchain technology

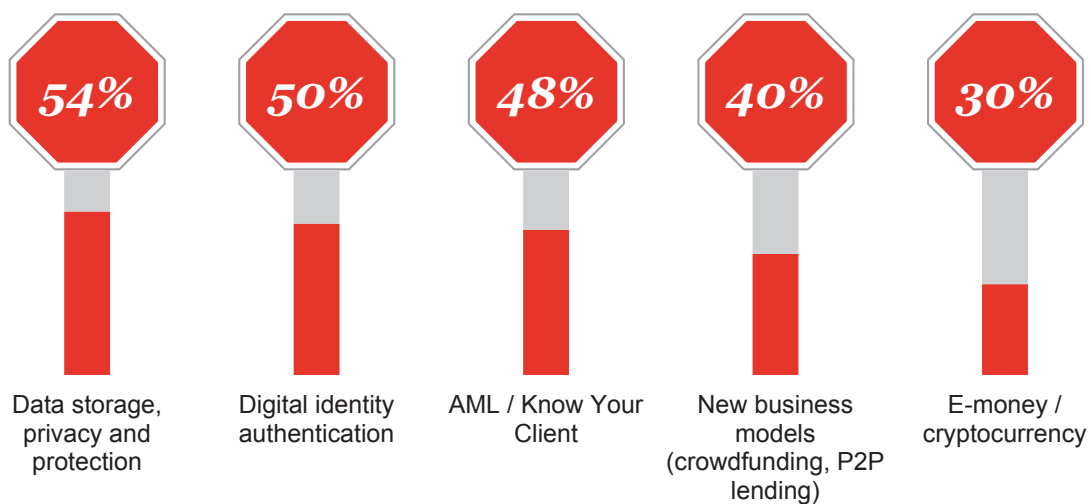


Source: PwC Global FinTech Survey 2017



Regulations trigger both disruption and innovation

Q: In which areas do you see regulatory barriers to innovation in FinTech?

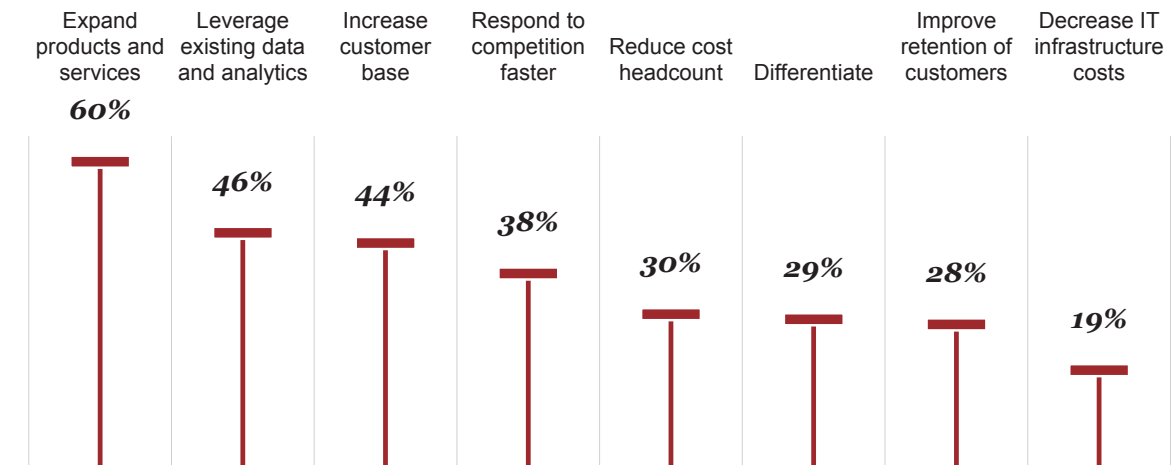


Source: PwC Global FinTech Survey 2017

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Managing expectations will be key...

Q: In your opinion, what are the opportunities related to the rise of FinTech within your industry?



Source: PwC Global FinTech Survey 2017

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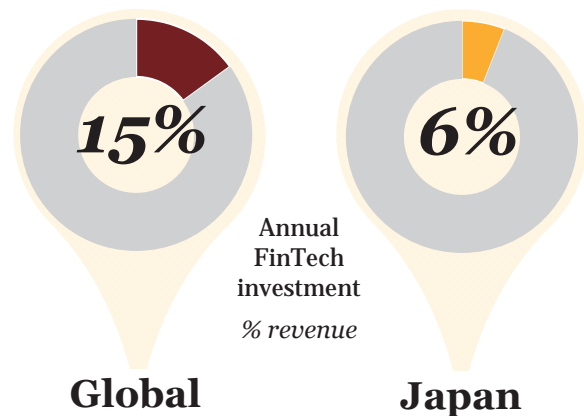


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FinTech moving at a slower pace for Japan's Financial Institutions

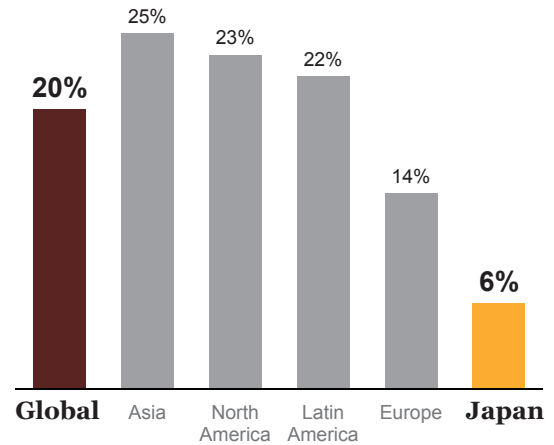
The only way to get returns is to invest to learn.

Q: What percentage of your annual revenue do you allocate to FinTech matters (investments into FinTech, IT projects, dedicated resources)?



Source: PwC Global FinTech Survey 2017

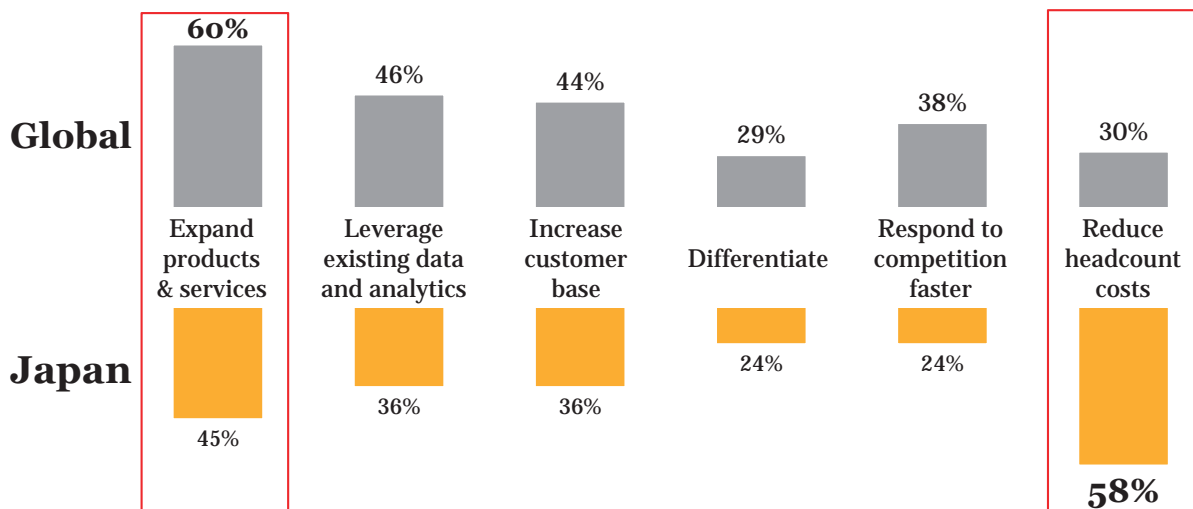
Q: What is your expected annual Return on Investment (ROI) on your projects related to FinTech?



25

Different expectations on potential impacts of FinTech

Q: In your opinion, what are the opportunities related to the rise of FinTech within your industry?



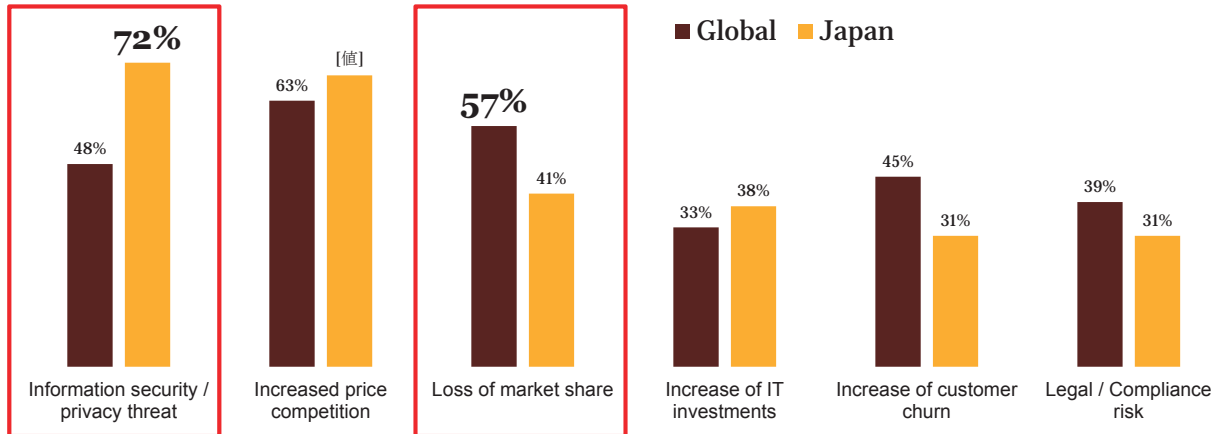
Source: PwC Global FinTech Survey 2017

26

Threats imposed by FinTech

Information security is a larger concern for Japanese financial institutions compared to their counterparts who worried more about market competitiveness.

Q: In your opinion, what are the threats related to the rise of FinTech within your industry?



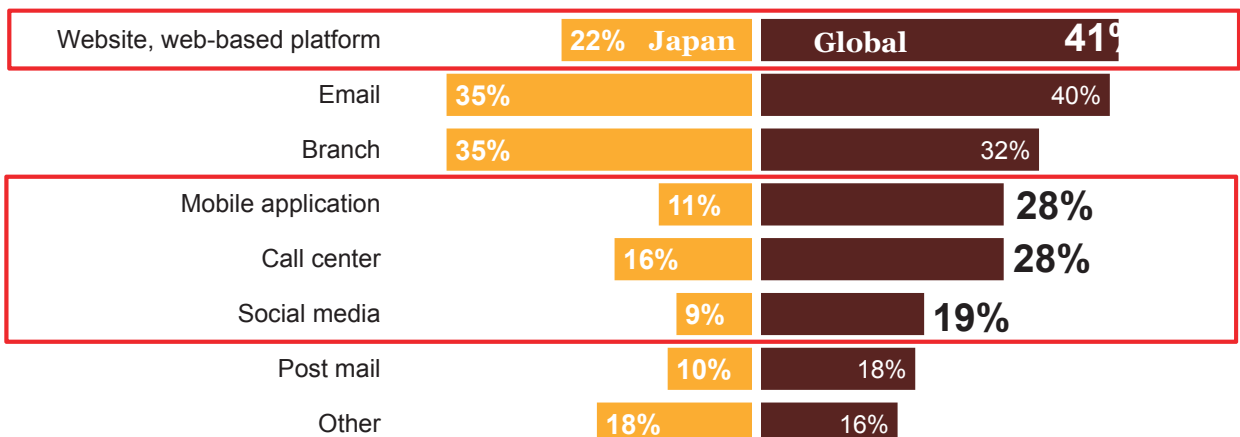
Source: PwC Global FinTech Survey 2017

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Renewed digital customer experience driven by customer centricity

Japanese financial institutions are slower in adopting digital channels to interact with customers

Q: What percentage of your clients do you interact with through the following channels?



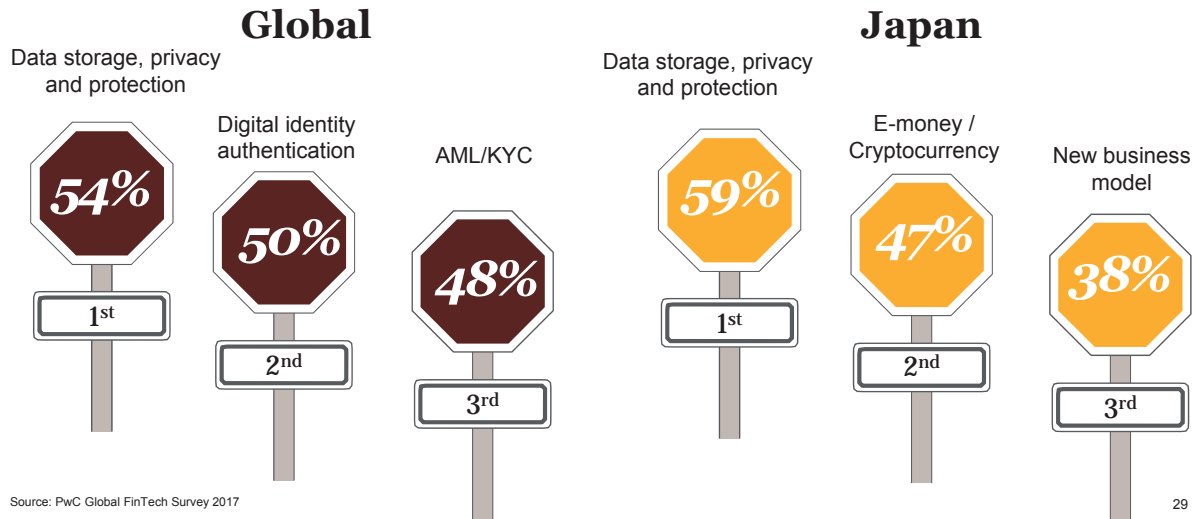
Source: PwC Global FinTech Survey 2017

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Regulatory barriers to innovation

Complexities of managing privacy, digital identity, and detailed customer data can be expensive hurdles

Q: In which areas do you see regulatory barriers to innovation in FinTech?



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4

Discussion points

Tough questions to ask for business leaders

1. What parts of your business model will benefit from further automation?
2. Is your HR function ready to adapt to managing man and machine? What's missing from its capabilities and how will you fix it fast?
3. How are you going to find the rarer skills like leadership, creativity and adaptability required for your company to innovate and build brand differentiation?
4. Have you considered how artificial intelligence and automation will help you create competitive advantage in your key markets?
5. Have you redesigned your business processes so that your employees are best placed to work seamlessly with automation to create new value?

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Thank you

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8. 成果

1. 日米フォーラム：活動と成果

<活動>

2017年度の日米フォーラムは、6月2日（金）米国カリフォルニア州パロアルト（Palo Alto）にあるスタンフォード大学アジア太平洋研究センター（APARC）との共催により同大学 Encina Hall の会議室にて開催された。

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、主にワシントン DCで行ってきており、今回開催のカリフォルニア州ベイエリアでは2005年のサンフランシスコ以来久しぶりの開催となった。開催地であるパロアルトが位置するシリコンバレーは世界の技術革新、新産業の創造、発展をリードしており、また、米国の内向き指向に対抗する地でもあり、当フォーラムが中心的な課題としている、持続的発展を遂げる上での制約要因やその解決策の模索に最適地である。

そして、“Economic Policy Challenges in the US and Japan（日米の経済政策課題）”の大きなテーマのもとに、次の3つのセッションを設け、日本側4名、米国側7名のメインスピーカーに加えて、現地日本関係者7名を含むトータル32名の参加によりラウンドテーブル・ディスカッションを行った。

Session 1: Growth Strategies of the US and Japan（日米の成長戦略）

Session 2: Globalization and Inequality（グローバル化と不平等）

Session 3: Is Technology the Answer?（テクノロジーは解決策となるのか？）

セッション1（日米の成長戦略）では、

問題意識は、①米国経済はヨーロッパと比べて上手く行っているが、貧富の格差の是正に成功していない状況である。これをグローバル化の所為だとして、内向きな政策を指向するトランプ政権は発足から100日を過ぎ、どのような政策を立案、執行しているであろうか、そしてそれは経済を浮揚させるのだろうか？②日本では、アベノミクスは上手く作用し、経済浮揚につながっているのか？課題は何か？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。

- ・日本経済は現時点で実体的には良好に推移しているが、インフレ率がゼロに近い、財政赤字が続き、実質賃金が上がり国内消費が低迷、人口動態の変化で継続的な労働力不足といった問題がある。これらに対してアベノミクスによる構造改革で対応を進めている。

- ・財政赤字対応は本質的に複数世代にまたがる投資であるため、今日の政策立案者は意欲的に対応しない可能性がある。そこで次世代の利益を代表する独立の財政機関を政治改革により創設する必要がある。

・生産性の向上については、マネジメント・プラクティスによる方法が考えられる。これに関して、世界の多数の国の企業に対して行われた世界経営調査の結果では、企業の生産性に関するマネジメント・プラクティスの割合が日本企業は他の OECD 加盟国の企業に比べて低い。改善するには、政府が多国籍企業の日本への誘致をはかり、それら企業から日本企業が学ぶという方法がある。

・トランプ政権の政策については、その中核は減税、赤字削減、特定分野の規制緩和があるが、今次フォーラム時点では具体的な動きはない。また、多くの重要課題—投資、貿易、法の支配、グッドガバナンスなどについて政策を十分実行していない。

セッション 2（グローバル化と不平等）では、

問題意識は、①グローバリゼーションが格差の原因なのか？②反グローバリゼーションの感情は先進国の経済政策にどのように影響するのか？③日米はこうした動きに対してどのように対応すべきなのか？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。

・グローバル化時代における不平等の原因は、米国においてはテクノロジーの進歩に見合った教育水準の向上ができていないことであり、グローバル化はスケープゴートに過ぎない。

・グローバル化は様々の業種でのサプライチェーンに広く、深く浸透しており、これらは、多数の自由貿易協定の存在と密接に関係している。

・貧困だけが不平等の促進要因となるわけではない。現況に最も不満を感じているのは、最貧層の人々ではなく、自分たちの地位を失った、最下位から 2 番目の下層市民である。

・移民などの問題に対する有権者の態度に影響を及ぼすのは絶対的な貧困ではなく、むしろ不公平感である。

・反グローバル化の解決策は「包括的な成長（inclusive growth）」との意見があるが、「包括的な成長」の意味やそれをどのように達成するかは現在のところ明確になっていない。

セッション 3（テクノロジーは解決策となるのか？）では、

問題意識は、①当フォーラムの開催地であるシリコンバレーは活発な技術革新で世界経済をリードしているが、これらの新技術は先進国の経済成長に貢献している、あるいは将来にわたり貢献するであろうか？②現在起こっているのは 100 年前に起こった産業革命に匹敵する新たな産業革命なのか？③あるいは、これらの新技術は経済成長には関係するのか、しないのか？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。

・シリコンバレーでの企業調査によれば、研究者の技術革新意欲は、持ち家の価格の下落に際しては、雇用の安定を維持しようとして開発の失敗を回避しようとして、低下する。一方価格が上昇しても革新意欲には変化がないことが分かった。

・米国ではテクノロジーが労働者から職を奪うことを懸念しているが、日本ではテクノロジーを活用して労働力不足を補うことを望んでいる。

・企業の事業とテクノロジーの関係についての CEO を対象とした国際的な調査からは、日本の CEO が世界から多くの点で遅れをとっていることが分かった。「フィンテック」について、日本

の金融機関が受け入れる速度は世界のトレンドより緩慢である。

・シリコンバレーでは、開発されたテクノロジーを日本企業が活用してビジネス開発を行っている。日本企業はシリコンバレーから新しいアイデアを学ぶと同時に、シリコンバレーのエコシステム全般に貢献できる。

・日本企業が、イノベーションを推進するには、内部組織に革新的な人員を配置する、失敗を寛容するなどイノベーションに好意的な企業文化を構築する必要がある。

<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4名、米国側スピーカー7名（含む、日系企業関係者1名）が3つのセッションの場で冒頭の発表を行い、スタンフォード大学の関係者、シリコンバレーのビジネスマン、ジェトロ・サンフランシスコ事務所の東條所長などの日本関係者（7名）が議論に参加、合計32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。（議事のポイントをスタンフォード大学 APARC 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、これらの場で日本経済の状況、成長戦略、アベノミクス、グローバル化、自由貿易協定、技術革新と経営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史料される。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. 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4名から高い満足の回答（全員最上位）を得た。また、事前の期待との関係でも、3名から期待にたがわぬものであったとの回答を得た（期待通り2名、概ね期待通り2名）。
具体的なコメントとしては、「Topics、Speakerの厳選、運営など興味深く、また、スムーズだった。」があった。他方、「いずれのパネルも、もう少し事前に論点が整理されていればという感があった。」とのコメントもあり、次回開催の留意点としたい。
4. 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。
5. 米国側参加者に対しても満足度アンケートを行い、15名から回答（回収率47%）を得た。（結果の総表は別添している。）

主な結果は、

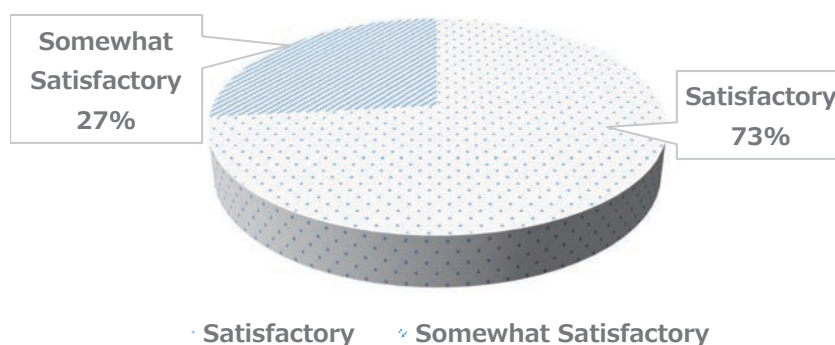
- ・会議の感想は、満足度4段階中最上位（満足）73%、第2位（やや満足）27%と全員から高い評価をいただいた。
 - ・セッションの中では、第2セッション（グローバル化と不平等）、第3セッション（テクノロジーは解決策となるのか？）の満足度が高かった。
 - ・また、期待との関係でも、期待以上40%、期待通り60%と評価が高かった（いずれも最上位73%）。
6. これらの議論のサマリーは、当財団のホームページに掲載されており、実際にフォーラムに参加した方々に加えて、今後多くの方に見ていただくことにより、波及効果が期待される。

9. 参考資料 <参加者アンケート結果>

Questionnaire Result

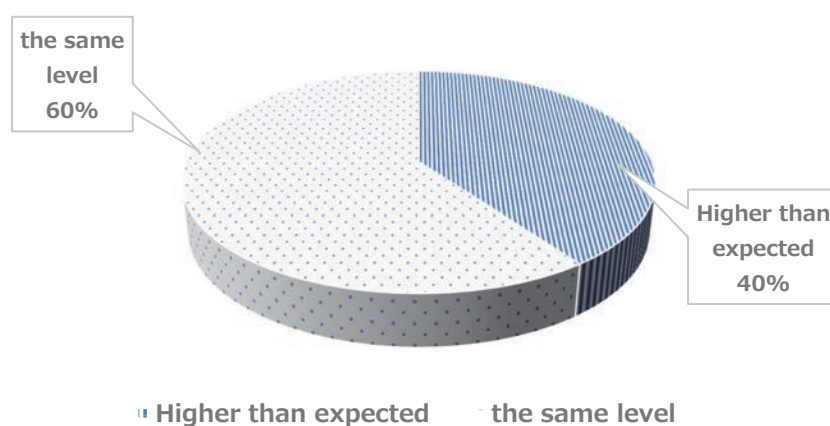
15 responses out of 30 participants, 50% of the response rate.

1. Overall Evaluation of the Forum



Satisfactory	Somewhat Satisfactory	Somewhat Unsatisfactory	Unsatisfactory	out of
11	4	0	0	15

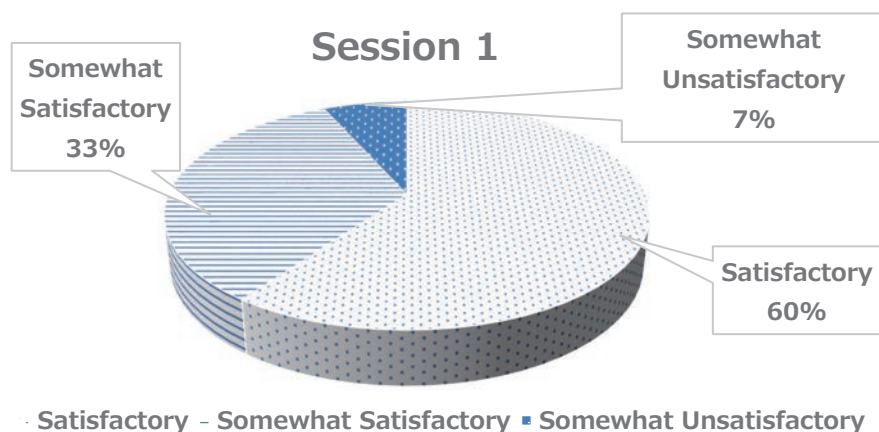
2. Evaluation of the Quality of the Forum as compared with your expectation



Higher than expected	the same level	Lower than expected	out of
6	9	0	15

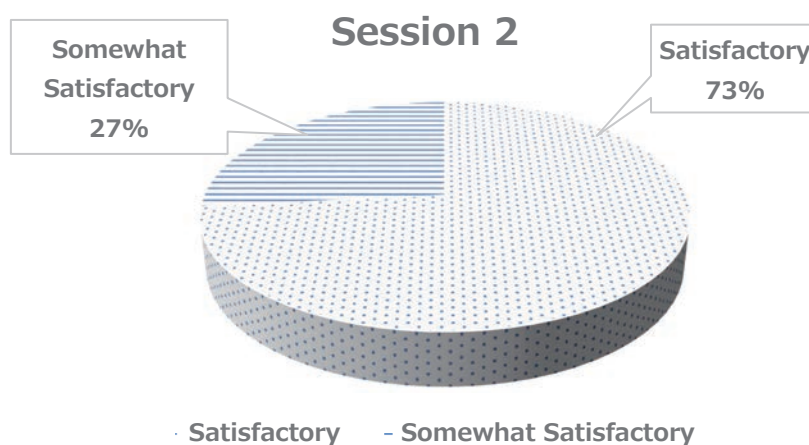
3. Session by Session Evaluation

Session 1: Growth Strategies of the US and Japan



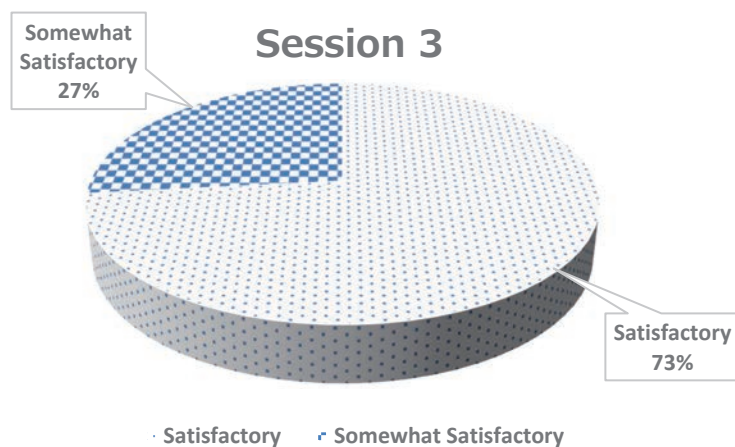
Satisfactory	Somewhat Satisfactory	Somewhat Unsatisfactory	Unsatisfactory	out of
9	5	1	0	15

Session 2 : Globalization and Inequality



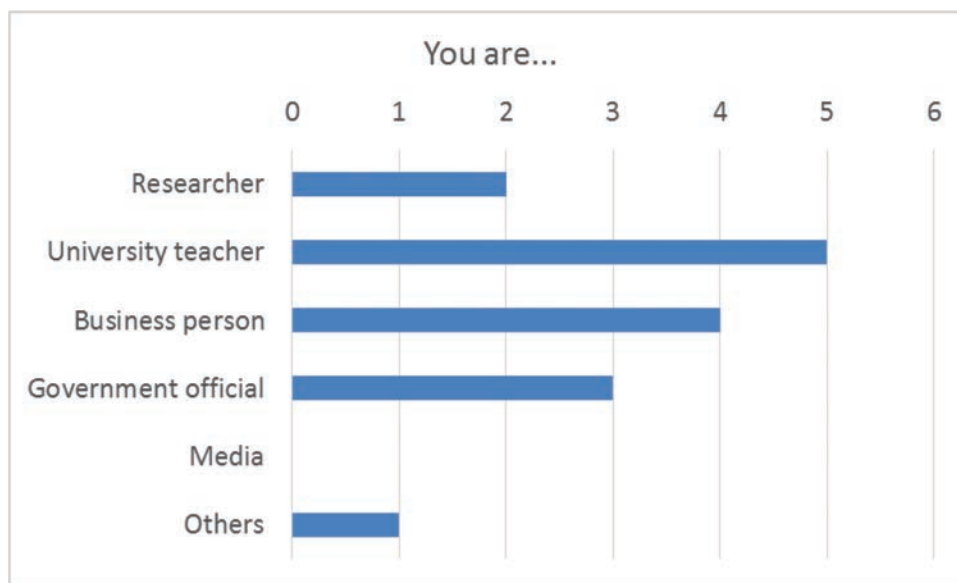
Satisfactory	Somewhat Satisfactory	Somewhat Unsatisfactory	Unsatisfactory	out of
11	4	0	0	15

Session 3: Is Technology the Answer? (or Will Silicon Valley Save the World?)



Satisfactory	Somewhat Satisfactory	Somewhat Unsatisfactory	Unsatisfactory	out of
11	4	0	0	15

4. You are:



Researcher	University teacher	Business person	Media	Government office	Others	out of
2	5	4	0	3	1	15

10. 共催団体紹介



Japan Economic Foundation (JEF)

The Japan Economic Foundation (JEF) was established in July 1981 to deepen understanding between Japan and other countries through activities aimed at promoting economic and technological exchange.

With this goal in mind, JEF engages in a broad range of activities such as providing information about Japan and arranging venues for the exchange of ideas among opinion leaders from many countries in such fields as industry, government, academia and politics in order to build bridges for international communication and to break down the barriers that make mutual understanding difficult.

URL: www.jef.or.jp



The Japan Program is an initiative of the Walter H. Shorenstein Asia-Pacific Research Center, a unique Stanford University institution focused on the interdisciplinary study of contemporary Asia. As an integral part of the Center, the Program facilitates multidisciplinary, social science-oriented research on contemporary Japan, emphasizing both academic scholarship and policy-relevant research. The Program aims to become a central platform for Stanford students and the broader community for understanding and engaging with Japan.

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