

Center on Japanese Economy and Business

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ANNUAL REPORT 2017-2018 (JULY 2017-JUNE 2018)

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Center on Japanese Economy and Business

Center on Japanese Economy and Business

The preeminent academic center in the United States on Japanese business and economics

Established at Columbia Business School (CBS) in 1986 under the direction of Professor Hugh Patrick, the Center on Japanese Economy and Business (CJEB) promotes knowledge and understanding of Japanese business and economics in an international context. CJEB is a research organization widely recognized for its symposia, conferences, and lectures held both in New York and Tokyo, which provide prominent speakers from the public and private sectors a forum for collaboration and reflection on Japan, the United States, and the global economy.

With the leadership of Professors David E. Weinstein, director of research, and Takatoshi Ito, director of the Program on Public Pension and Sovereign Funds and associate director of research, CJEB supports research projects, student and faculty scholarship, and library and computer-based resource initiatives. Other CJEB core faculty members are Japan specialists drawn from Columbia's Business School, Law School, School of International and Public Affairs, Department of Economics, and Department of Political Science. While CJEB is an independent and nonpartisan research center which takes an objective stance on political or economic policies, we encourage our researchers and scholars to hold their own individual perspectives. Funding and resources are provided by corporate sponsors, foundations, individuals, CBS, and Columbia University.

Since its founding, CJEB has developed, grown, and evolved in order to carry out its mission effectively in a changing Japan and a changing world. In this way, CJEB has been able to build and maintain its status as the preeminent academic center in the United States on Japanese business and economics.

Further information about CJEB can be found on the Center's website: www.gsb.columbia.edu/cjeb.

Letter from the Directors



Hugh Patrick, Director



David E. Weinstein, Director of Research

Dear Friends,

Since its founding in 1986, the Center on Japanese Economy and Business (CJEB) has made its mission promoting knowledge and understanding of the Japanese economy and business systems in U.S., Asian, and global contexts. Looking back over this past year, CJEB has continued to accomplish this through a wide range of public symposia, conferences, research projects, paper series, and visitor programs. Japan's economy has steadily recovered over the last several years and will continue to comfortably grow for the next couple of years. Inevitably, long-term prospects are uncertain.

Over the past academic year, CJEB continued to address and examine several key challenges and prospects for Japan's economy and business systems through a series of public programs. On September 21, 2017, CJEB cosponsored a lecture at Columbia featuring Tarō Kōno, foreign minister of Japan, together with the APEC Study Center, the School of International and Public Affairs (SIPA), and Weatherhead East Asian Institute (WEAI) of Columbia University (p. 39). During his lecture, Foreign Minister Kono addressed diplomatic and economic issues related to North Korea, China, the United States, and the Middle East. CJEB once again organized and collaborated with NHK (Japan Broadcasting Corporation) in the fall for another broadcasted program, which featured several of CJEB's distinguished core faculty members discussing President Trump's economic policies and their implications for Asia. On November 21, 2017, the panel again relied upon Glenn Hubbard, Dean and Russell L. Carson Professor of Finance and Economics at Columbia Business School; Joseph E. Stiglitz, University Professor; David E. Weinstein, Carl S. Shoup Professor of the Japanese Economy; and Takatoshi Ito, professor at the School of International and Public Affairs at Columbia University, on NHK's debate program, Global Agenda (p. 37). The Honorable Yasuhisa Shiozaki, member of the House of Representatives of Japan and former Minister of Health, Labour and Welfare of Japan, gave a special lecture on February 27, 2018, to the Columbia community, sharing his perspective on Japan's challenges on the country's changing demographics, increased health care system costs, and needed improvements to corporate governance (p. 40).

CJEB held its highly successful annual conference in Tokyo on May 28, 2018. The conference, "Japan as a Leading Power: Trade and the Fintech Revolution," featured a keynote address by Wendy Cutler, vice president and managing director of Asia Society Policy Institute, Washington, D.C. Office, and former major U.S. trade policymaker. Ms. Cutler discussed the challenges and opportunities in U.S.-Japan trade relations. The conference featured two major panels. The first panel held a discussion on the international trade system, specifically the U.S. administration tariff impositions and trade issues, and the Trans-Pacific Partnership (TPP), now led by Japan following President Trump's U.S. withdrawal. In the second panel, the panelists deliberated on Fintech as a disruptive innovation, and also discussed the increasing use of blockchain technology, cryptocurrency, and central bank digital currencies. More details about the Tokyo Conference can be found on p. 33.

CJEB continues to successfully host its *zadankai* lunchtime lectures. Glen S. Fukushima, senior fellow at the Center for American Progress, spoke on the Trump administration's Asia Policy (p. 42), while Reiichiro Takahashi, ambassador of the Consul-General of Japan in New York, provided insights into the international issues that Japan faces in a changing global economy (p. 40). Hiroshi Nakaso, immediate past deputy governor at the Bank of Japan (BOJ), spoke about his experience at the BOJ and his involvement in attempting to raise the country's inflation rate (p. 44). To read about our other *zadankai* seminars, please see p. 41.

CJEB also organized several events as part of its two research programs, the Program on Public Pension and Sovereign Funds (PPPSF) and the Corporate Governance and Stewardship Program. On February 26, 2018, CJEB held its annual Conference on Public Pension and Sovereign Funds, led by Takatoshi Ito, featuring keynote speeches by Jacob J. Lew, former secretary of the Treasury and visiting professor of international and public affairs at SIPA, and Yasuhisa Shiozaki. The conference had three sessions. The first was on the macro environment and challenges to long-term investors, the second covered environmental, social, and governance (ESG) investments, and the third investigated infrastructure and real assets (p. 32). Two symposia were held in conjunction with CJEB's Corporate Governance and Stewardship Program, led by Alicia Ogawa: "Power to the Pensions! Japanese and NYC Pension Funds as a Force for Good Governance," with Michael Garland, assistant comptroller of the Corporate Governance and Responsible Investment at the Office of NYC Comptroller; and Ken Hokugo '93, director and head of Corporate Governance and director of hedge fund investments at the Pension Fund Association of Japan, on November 9, 2017 (p. 36). The second was "A Tale of Two Systems: What Went Wrong at Toshiba and Wells Fargo," with Bruce Aronson, professor at the Business Law Department of Hitotsubashi University; Shane Goodwin, senior fellow and project director at the Richard Paul Richman Center for Business, Law, and Public Policy at Columbia University; and Josh Rosner, managing director at Graham Fisher & Co., on March 22, 2018 (p. 37).

CJEB invests in developing the next generation of academic leadership on the Japanese economy and its business systems by offering a variety of fellowship and scholarship opportunities for students interested in studying and specializing in Japan. In the past year, CJEB's first PhD fellow, Jackson Lu of Columbia Business School, completed his PhD program and was appointed to the MIT Sloan School faculty. You can read more about our initiatives, fellowships, and scholarships offered over the past academic year on p. 56.

Every year, we consider how to enhance and expand on our Visiting Fellows Program (p. 47). CJEB Visiting Fellows are selected from Japanese companies, academia, and the government and come to Columbia, normally for a year, to pursue independent study and research. CJEB Visiting Fellows have access to many of Columbia's rich resources, including the University's libraries and public events; the opportunity to engage with students and faculty of the Columbia community; and the ability to audit a wealth of courses at Columbia. It is important that our Visiting Fellows acquire necessary cross-cultural substantive and communicative skills in an increasingly global landscape and changing world economy. CJEB hosted several communication work-shops and provided individual coaching sessions for our Visiting Fellows to improve their presentation skills. Our Visiting Fellows had the opportunity to put all of this knowledge into practice by presenting their research to CJEB directors and their peers in monthly seminars. CJEB has proudly hosted more than 260 Visiting Fellows since the Center's establishment in 1986.

The Center will continue to thrive as a distinguished academic and research center under the shared leadership of us both, Hugh Patrick and David Weinstein. Eventually, David will assume sole leadership, but not in the near future.

The Center's accomplishments are made possibly only through the dedication and energy of the faculty and staff directly involved, the resources provided by the Business School and the University, and, notably, the generous funding provided by our corporate sponsors, foundations, and individuals. We thank all our supporters deeply.

With warm regards,

And Patrick David Warran

Hugh Patrick Director July 15, 2018

David E. Weinstein

David E. Weinstein Director of Research

Leadership and Staff



Hugh Patrick is the founder and director of the Center on Japanese Economy and Business (CJEB) and R. D. Calkins Professor of International Business Emeritus

at Columbia Business School, as well as codirector of Columbia's APEC Study Center. He joined the Columbia faculty in 1984 after some years as professor of economics and director of the Economic Growth Center at Yale University. He completed his BA at Yale University (1951), obtained MA degrees in Japanese studies (1955) and economics (1957), and earned a PhD in economics at the University of Michigan (1960). He has been a visiting professor at Hitotsubashi University, the University of Tokyo, and the University of Bombay. Professor Patrick has been awarded Guggenheim and Fulbright fellowships and the Ohira Prize. His professional writings include 18 books and some 60 articles and essays. His most recent books are How Finance Is Shaping the Economies of China, Japan, and Korea (Columbia University Press, 2013), coedited with Yung Chul Park; and Reviving Japan's Economy: Problems and Prescriptions (MIT Press, 2005), coauthored and coedited with Takatoshi Ito and David E. Weinstein. Professor Patrick served as one of four American members of the binational Japan-United States Economic Relations Group appointed by President Carter and Prime Minister Ohira from 1979 to 1981. He has been a member of the Council on Foreign Relations since 1974. He was a member of the Board of Directors of the Japan Society for seven three-year terms. In November 1994, the Japanese Government awarded him the Order of the Sacred Treasure. Gold and Silver Star (Kunnitō Zuihōshō). He was

awarded an honorary doctorate of Social Sciences by Hong Kong's Lingnan University in 2000 and the Eagle on the World award by the Japanese Chamber of Commerce and Industry of New York in 2010.



David E. Weinstein is the Carl S. Shoup Professor of the Japanese Economy at Columbia University. He is also the director of research at CJEB, director of the Japan

Project at the National Bureau of Economic Research (NBER), executive director of the Program for Economic Research in the Department of Economics at Columbia, and a member of the Federal Economic Statistics Advisory Committee. Previously, Professor Weinstein was chair of the Department of Economics and a senior economist as well as a consultant at the Federal Reserve Bank of New York, the Federal Reserve Bank of San Francisco, and the Federal Reserve Board of Governors. Prior to joining the Columbia faculty, Professor Weinstein held professorships at the University of Michigan and Harvard University. He also served on the Council of Economic Advisers from 1989 to 1990. His teaching and research interests include international economics, corporate finance, and the Japanese economy. Professor Weinstein earned his PhD and MA in economics from the University of Michigan and his BA at Yale University. He is the recipient of many grants and awards, including five National Science Foundation grants, an Institute for New Economic Thinking grant, a Bank of International Settlements Fellowship, and a Google Research Award. Professor Weinstein is the author of numerous publications and articles.



Takatoshi Ito is

the director of the Program on Public Pension and Sovereign Funds and associate director of research at CJEB. He is also a professor at the

School of International and Public Affairs (SIPA) at Columbia University. He has taught extensively both in the United States and Japan since finishing his PhD in economics at Harvard University in 1979. He was an assistant and tenured associate professor (1979-1988) at the University of Minnesota, an associate and full professor at Hitotsubashi University (1988-2002), a professor at the Graduate School of Economics at the University of Tokyo (2004-2014), and dean of the Graduate School of Public Policy at the University of Tokyo (2012-2014) before assuming his current position in 2015. In spring 2016, he received a courtesy appointment in the Finance and Economics Department at Columbia Business School. He held visiting professor positions at Harvard University, Stanford University, and Columbia Business School and was Tun Ismail Ali Chair Professor at the University of Malaya.

He has held distinguished academic and research appointments such as president of the Japanese Economic Association in 2004-2005, fellow of the Econometric Society since 1992, research associate at the National Bureau of Economic Research since 1985, faculty fellow at the Centre for Economic Policy Research in London since 2006, research associate of the Tokyo Center for Economic Research since 1990, and faculty fellow of the Research Institute of Economy, Trade and Industry since 2004. He was editor-in-chief of the Journal of the Japanese and International Economies and is coeditor of the Asian Economic Policy Review. In an unusual move for a Japanese academic, Professor Ito was appointed senior adviser in the Research Department at the International Monetary Fund (1994-1997) and Deputy Vice Minister for International Affairs at the Ministry of Finance of Japan (1999-2001). He also served as a member of the Prime Minister's Council on Economic and Fiscal Policy (2006-2008).

In 2010, Professor Ito was a coauthor of a commissioned study of the Bank of Thailand's 10th-year review of its inflation targeting regime. He frequently contributes op-ed columns and articles to the Financial Times and Nihon Keizai Shinbun. He is the author of many books, including The Japanese Economy (MIT Press, 1992), The Political Economy of Japanese Monetary Policy (1997), and Financial Policy and Central Banking in Japan (2000, both with T. Cargill and M. Hutchison, MIT Press); An Independent and Accountable IMF (with J. De Gregorio, B. Eichengreen, and C. Wyplosz, 1999); and more than 130 academic (refereed) journal articles and chapters in books on international finance, monetary policy, and the Japanese economy. His research interests include 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.



Alicia Ogawa is

is the director of the Project on Japanese Corporate Governance and Stewardship at CJEB. She is also a consultant to one of the largest

U.S.- based macro hedge funds in the United States and an adjunct associate professor at SIPA. Until 2006, she was managing director at Lehman Brothers, where she was responsible for managing the firm's global equity research. Prior to joining Lehman Brothers, she spent 15 years in Tokyo, where she was a top-rated bank analyst and director of research for Nikko Salomon Smith Barney, having managed the original Salomon Brothers Research Department through three mergers. She is a member of the board of directors of the Maureen and Mike Mansfield Foundation, a member of the investment committee of the Association for Asian Studies, and a member of the President's Circle of the All Stars Project, a development program for inner city young people, which was recently launched in Tokyo. She graduated from Barnard College and earned a master's degree in international affairs at SIPA. She is a member of the International Corporate Governance Network.



Ryoko Ogino is the director for administration at CJEB. She officially joined the Center as associate director for administration in September 2010 after successfully

managing the Center's Tokyo conference in spring 2010. Prior to that, she held positions at Shiseido Americas Corporation and Sony Corporation of America, bringing a wealth of experience in product development, PR, international marketing, and staff management. She graduated magna cum laude from the State University of New York, Buffalo, with a major in human relations in multinational organizational settings sponsored by the Department of Psychology and Management.

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Core Faculty

CJEB's eight core faculty members provide the Center's intellectual foundation and are drawn from Columbia University's Business School, Law School, Department of Economics, Department of Political Science, and School of International and Public Affairs. In addition to Hugh Patrick, David E. Weinstein, and Takatoshi Ito, CJEB's core faculty members are as follows:



Gerald L. Curtis is Burgess Professor Emeritus of Political Science at Columbia University and former director of the Weatherhead East Asian Institute. He received his PhD from

Columbia University in 1969 and was on the Columbia University faculty from 1969 until December 2015. He is a professor emeritus, a senior research scholar at the Weatherhead East Asian Institute, and director of Columbia's Toyota Research Program. He is the author of numerous books and articles published in both English and Japanese on Japanese politics, government, foreign policy, and United States–Japan relations. He divides his time between Columbia University and Tokyo, where he is active as a columnist, speaker, and writer.

Professor Curtis has held appointments at the Royal Institute of International Affairs, Chatham House, London; the College de France, Paris; the Lee Kwan Yew School of Public Policy, Singapore; and in Tokyo at Keio, Tokyo, and Waseda Universities, the Research Institute for Economy, Trade and Industry, the Graduate Research Institute for Policy Studies, and the International Institute for Economic Studies.

In addition to his academic work, he has served as director of the U.S.-Japan

Parliamentary Exchange Program, special adviser to Newsweek for Newsweek Japan, columnist for the Tokyo/Chunichi Shimbun and member of the International Advisory Board of the Asahi Shimbun and the Advisory Council for the Japan Foundation Center for Global Partnership. His articles and commentaries appear frequently in newspapers and magazines in Europe, Japan, and the United States. Professor Curtis is a member of the Board of Directors of the Japan Society, the Japan Center for International Exchange, and the Mansfield Foundation and serves as councilor to the U.S.-Japan Council. He has served as consultant and adviser to numerous public and private organizations in the United States and Japan.

Professor Curtis is the recipient of numerous prizes and honors, including the Masayoshi Ohira Memorial Prize, the Chunichi Shimbun Special Achievement Award, the Japan Foundation Award, the Marshal Green Award of the Japan-America Society of Washington, and the Eagle on the World award from the Japanese Chamber of Commerce in New York. He is a recipient of the Order of the Rising Sun, Gold and Silver Star, one of the highest honors awarded by the Japanese government.



Glenn Hubbard is dean and Russell L. Carson Professor of Finance and Economics at Columbia Business School. Dean Hubbard received his BA and BS degrees

summa cum laude from the University of Central Florida and also holds AM and PhD degrees in economics from Harvard University. In addition to writing more than 100 scholarly articles on economics and finance, Dean Hubbard is the author of three popular textbooks, as well as coauthor of The Aid Trap: Hard Truths About Ending Poverty, Balance: The Economics of Great Powers from Ancient Rome to Modern America, and Healthy, Wealthy, and Wise: Five Steps to a Better Health Care System. His commentaries appear in Business Week, The Wall Street Journal, The New York Times, the Financial Times, the Washington Post, Nikkei, and the Daily Yomiuri, as well as on television and radio. From 2001 until 2003, he was chairman of the U.S. Council of Economic Advisers. In the corporate sector, he is on the boards of ADP, BlackRock Closed-End Funds, and MetLife. Dean Hubbard is cochair of the Committee on Capital Markets Regulation; he is a past chair of the Economic Club of New York and a past cochair of the Study Group on Corporate Boards.



Merit E. Janow is

dean of Columbia University's School of International and Public Affairs. Dean Janow is an internationally recognized expert in international trade

and investment, with extensive experience in academia, government, international organizations, and business. In addition, she has had a lifelong involvement with Asia and is an expert on that region. Dean Janow has been a professor of practice at Columbia University's School of International and Public Affairs (SIPA) and affiliated faculty at Columbia Law School since 1995. She teaches graduate courses in international trade/WTO law, comparative antitrust law, China in the global economy, and international trade and investment policy, among others. She has held a number of leadership positions at the University. Currently, she is codirector of the APEC Study Center. Previously, she was director of the Master's Program in International Affairs and chair of Columbia University's Advisory Committee on Socially Responsible Investing. Her research interests focus on international trade and investment, Asia, competition law, economic globalization, digital trade, internet governance, and cybersecurity. She has written several books and numerous articles and frequently speaks before business, policy, and academic audiences around the world.

While at Columbia University, Dean Janow was elected in December 2003 for a fourvear term as one of the seven members of the World Trade Organization's (WTO) Appellate Body, which is the court of final appeal for adjudicating trade disputes between the 161 members of the WTO. She was the first woman to serve on the Appellate Body. She was involved in more than 30 appeals. While on the Appellate Body, she organized a series of global conferences with leading experts and senior government officials that focused on the Appellate Body, the international trading system, and economic globalization. From 1997 to 2000, Dean Janow served as the executive director of the first international antitrust advisory committee of the U.S. Department of Justice that reported to the attorney general and the assistant attorney general for antitrust. Her report recommended the creation of a global network of enforcers and experts, which is now the International Competition Network.

Prior to joining Columbia's faculty, Dean Janow was deputy assistant U.S. trade representative for Japan and China (1989– 1993). She was responsible for developing, coordinating, and implementing U.S. trade policies with Japan and China. She negotiated more than a dozen trade agreements with Japan and China during a period of intense economic and political tension. Dean Janow serves on the Board of Directors for several corporations, financial services, technology companies, and not-for-profit organizations. In 2009, she became a charter member of the International Advisory Council of China's sovereign wealth fund. China Investment Corporation. Early in her career, Dean Janow was a corporate lawyer specializing in cross-border mergers and acquisitions with Skadden, Arps, Slate, Meagher & Flom in New York. Before becoming a lawyer, she worked at a think tank, where she focused on U.S.-Japan trade and economic relations. She grew up in Tokyo, Japan, and is fluent in Japanese. She has a JD from Columbia Law School, where she was a Stone Scholar, and received a BA in Asian studies with honors from the University of Michigan. She is a member of the Council on Foreign Relations and the Trilateral Commission.



Curtis J. Milhaupt

was the Parker Professor of Comparative Corporate Law, director of the Parker School of Foreign and Comparative Law, Fuyo Professor of

Japanese Law, and director of the Center for Japanese Legal Studies, all at Columbia Law School before joining the faculty at Stanford Law School in 2018. He was also a member of Columbia University's Weatherhead East Asian Institute. Professor Milhaupt's research and teaching interests included the legal systems of East Asia (particularly Japan), comparative corporate governance, law and economic development, and state capitalism. In addition to numerous scholarly articles. he has coauthored or edited seven books, including U.S. Corporate Law (Yuhikaku, 2009, in Japanese), Law and Capitalism: What Corporate Crises Reveal about Legal Systems and Economic Development

around the World (University of Chicago Press, 2008), and Transforming Corporate Governance in East Asia (Routledge Press, 2008). His research has been profiled in The Economist, the Financial Times, and The Wall Street Journal and has been widely translated. Professor Milhaupt lectures regularly at universities and think tanks around the world. Representative appointments include visiting professor at Tsinghua University, Paul Hastings Visiting Professor in Corporate and Financial Law at Hong Kong University, and Erasmus Mundus Fellow in Law and Economics at the University of Bologna. He was named Teacher of the Year in 2012 and 2010 at the Duisenberg School of Finance, University of Amsterdam, where he taught from 2008 to 2015. Professor Milhaupt has been a member of several international project teams focused on policy issues in Asia, including one charged with designing an "institutional blueprint" for a unified Korean peninsula. Prior to entering academia, Professor Milhaupt practiced corporate law in New York and Tokyo with a major law firm. He holds a JD from Columbia Law School and a BA from the University of Notre Dame. He also conducted graduate studies in law and international relations at the University of Tokyo.



Joseph E. Stiglitz

was born in Gary, Indiana, in 1943. A graduate of Amherst College, he received his PhD from MIT in 1967, became a full professor at Yale in 1970, and in 1979

was awarded the John Bates Clark Award, given biennially by the American Economic Association to the economist under 40 who has made the most significant contribution to the field. He has taught at Princeton, Stanford, and MIT and was the Drummond Professor and a fellow of All Souls College, Oxford. He is now University Professor at Columbia University in New York, where he is also the founder and copresident of the University's Initiative for Policy Dialogue. He is also the chief economist of the Roosevelt Institute. In 2001, he was awarded the Nobel Prize in economics for his analyses of markets with asymmetric information, and he was a lead author of the 1995 Report of the Intergovernmental Panel on Climate Change, which shared the 2007 Nobel Peace Prize. In 2011, *Time* named Stiglitz one of the 100 most influential people in the world.

Professor Stiglitz was a member of the Council of Economic Advisers from 1993 to 1995, during the Clinton administration, and served as CEA chairman from 1995 to 1997. He then became chief economist and senior vice president of the World Bank, from 1997 to 2000. In 2008, he was asked by the French president Nicolas Sarkozy to chair the Commission on the Measurement of Economic Performance and Social Progress, which released its final report in September 2009 (published as Mismeasuring Our Lives). He now chairs a High Level Expert Group at the OECD that is attempting to advance these ideas further. In 2009, he was appointed by the president of the United Nations General Assembly as chair of the Commission of Experts on Reform of the International Financial and Monetary System, which also released its report in September 2009 (published as The Stiglitz Report). Since the crisis, he has played an important role in the creation of the Institute for New Economic Thinking (INET), which seeks to reform the discipline so it is better equipped to find solutions for the great challenges of the 21st century.

Professor Stiglitz serves on numerous boards, including the Acumen Fund and Resources for the Future.

He helped create a new branch of economics,

"The Economics of Information," exploring the consequences of information asymmetries and pioneering such pivotal concepts as adverse selection and moral hazard, which have now become standard tools not only of theorists, but also of policy analysts. He has made major contributions to macroeconomics and monetary theory, to development economics and trade theory, to public and corporate finance, to the theories of industrial organization and rural organization, and to the theories of welfare economics and of income and wealth distribution. In the 1980s, he helped revive interest in the economics of R&D.

His work has helped explain the circumstances in which markets do not work well, and how selective government intervention can improve their performance.

In the last fifteen years, he has written a series of highly popular books that have had an enormous influence in shaping global debates. His book Globalization and Its Discontents (2002) has been translated into 35 languages, besides at least two pirated editions, and in the nonpirated editions have sold more than one million copies worldwide. In that book he laid bare the way globalization had been managed, especially by the international financial institutions. In two later sequels, he presented alternatives: Fair Trade for All (2005, with Andrew Charlton) and Making Globalization Work (2006). In The Roaring Nineties (2003), he explained how financial market deregulation and other actions of the 1990s were sowing the seeds of the next crisis. Concurrently, Towards a New Paradigm in Monetary Economics (2003, with Bruce Greenwald) explained the fallacies of current monetary policies, identified the risk of excessive financial interdependence, and highlighted the central role of credit availability. Freefall: America, Free Markets, and the Sinking of the World Economy (2010) traced in more detail the origins of the Great Recession, outlined a set of policies that

would lead to robust recovery, and correctly predicted that if these policies were not pursued, it was likely that we would enter an extended period of malaise. The Three Trillion Dollar War: The True Cost of the Iraq Conflict (2008, with Linda Bilmes of Harvard University) helped reshape the debate on those wars by highlighting the enormous costs of those conflicts. His most recent books are The Price of Inequality: How Today's Divided Society Endangers Our Future, published by W.W. Norton and Penguin/Allen Lane in 2012; Creating a Learning Society: A New Approach to Growth, Development, and Social Progress, with Bruce Greenwald, published by Columbia University Press in 2014; The Great Divide: Unequal Societies and What We Can Do About Them published by W. W. Norton and Penguin/ Allen Lane in 2015; Rewriting the Rules of the American Economy: An Agenda for Growth and Shared Prosperity published by W.W. Norton in 2015; The Euro: How a Common Currency Threatens the Future of Europe, published by W. W. Norton and Penguin/Allen Lane in 2016; and Globalization and Its Discontents Revisited: Anti-Globalization in the Era of Trump, published by W. W. Norton and Penguin/Allen Lane in 2017.

Professor Stiglitz's work has been widely recognized. Among his awards are more than 40 honorary doctorates, including from Cambridge and Oxford Universities. In 2010, he was awarded the prestigious Loeb Prize for this contributions to journalism. Among the prizes awarded to his books have been the European Literary Prize, the Bruno Kreisky Prize for Political Books, and the Robert F. Kennedy Book Award. He is a fellow of the National Academy of Sciences, the American Academy of Arts and Sciences, the American Philosophical Society, and the Econometric Society, and a corresponding fellow of the Royal Society and the British Academy.He has been decorated by several governments, including Colombia, Ecuador, and Korea, and most recently became a member of France's Legion of Honor (rank of Officier).

Japan's Economy: Stable, with Sustained Modest Change*

By Hugh Patrick

Japan is a safe, comfortable, well-to-do, peaceful democracy with a homogenous, socially cohesive society. Domestically, it is socially, politically, and economically stable. In an uncertain world, it is a safe haven in which to hold assets. Prime minister since 2012, Shinzo Abe was reelected president of the Liberal Democratic Party on September 20 and will continue in office until after the 2020 summer Olympics in Tokyo. The opposition parties, in shreds, are having a difficult time rejuvenating themselves.

Overall, the Japanese economy continues to do well, despite a blip in the first guarter of 2018. There have been no big domestic surprises, and none are likely. In 2017, GDP increased 1.7 percent, greater than estimated potential or projected. GNP per capita, in some ways a better measure than GDP growth since Japan's population is declining, increased by almost 1.9 percent. Unemployment continued to decline to 2.5 percent in July. Deflation has ended, but the major macroeconomic shortfall is that the 2 percent consumer price index (CPI) annual increase target has not been achieved. And it is not likely to be achieved any time soon. At the macro level, improvement is incremental and gradual. Indeed, this reads very much like my essay a year ago.

Japan continues its long-run transformation, which is driven by two major forces. One is demographics. Japan's aging and decreasing population and labor force are ongoing and predictable; Japanese live longer and better. The other is Japan's active participation in the ongoing global technological change that has been dubbed the "Fourth Industrial Revolution." Characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres, it builds and extends the impact of digitization in new and unanticipated ways.

Japan has to deal with many of the same structural economic issues as other advanced countries, including rural decline, work-life balance, significant income inequality, and persistent poverty for some 15 percent of its people. Two notable economic issues are the role of and discrimination against women, and the lagging increases in regular worker wages despite labor market tightening. An ongoing concern is that gross government debt is 253 percent of GDP, uniquely high among advanced countries. However, much is held by Japanese government institutions, so the net debt is nonetheless a relatively high 130 percent of GDP; it is mostly held by the Japanese private sector.

Japan is the world's third largest economy, after the United States and China, with a per capita GDP in 2017 of \$43,876, about the middle of the advanced OECD economies. This is 74 percent of the U.S. level and 87 percent of Germany's. Japan is the world's second largest investor, with foreign assets of \$2.98 trillion (at 110 yen per dollar). In contrast, the U.S. is the world's largest net debtor, at \$8.05 trillion.

Japan now has had leadership thrust upon it for regional trading agreements with Asia and Europe. Japan is relatively predictable; the world is much less so, particularly regarding geopolitical and national security matters. The ongoing rise of China is both a challenge and an opportunity. North Korea's nuclear weapons and missiles are a newer challenge. For its security Japan depends basically on the U.S.-Japan Security Treaty and its close alliance with the U.S., and on its Self-Defense Forces.

Japan now faces a major challenge from its closest ally and friend, the United States. U.S. president Donald Trump has embarked on a foreign policy that assails the marketoriented, rules-based international economic order dominant since World War II, attacking regional trade agreements in which Japan plays a major role, and applying tariffs against trading partners with which the U.S. has a bilateral trade deficit. The U.S.'s second-largest trade deficit is with Japan.

The International Context

Despite ongoing issues and challenges, the world economy is doing quite well, with a general improvement in the global economic outlook. This has been in large part because countries, despite political difficulties and tensions, have adhered pretty well to the rules-based, market-oriented WTO system and norms for international economic relations.

The global economy continued to achieve healthy, better-than-expected GDP growth of 3.1 percent in 2017 and possibly better in 2018, according to the June 2018 World Bank forecast.

Growth is expected to slow to 3.0 percent in 2019 and to 2.9 percent in 2020. Almost

* Japan produces excellent statistics, data, and analysis on the Japanese economy, including those provided by the government's Cabinet Office, Ministry of Economy, Trade, and Industry (METI), Ministry of Finance, and the Bank of Japan. The World Bank, the International Monetary Fund, and the Organisation for Economic Co-operation and Development (OECD) produce excellent comparative data and analysis. They provide the basics for a great deal of good academic and private market research.

every country has achieved, and will continue to achieve, increases in real GDP. As labor and other resources become more fully utilized, world growth will gradually slow, but it is forecast to be about 2.5 percent 10 years from now. However, real wages have been relatively stagnant in the advanced countries and have lagged behind increases in productivity, increasing income inequality. This, and the continuation of low interest rates, suggests remaining labor slack as potential workers reenter the labor force. Japan is an outstanding example of these trends. This disjunction in East Asia between good economic growth and ongoing political challenges, both domestic and international, is noteworthy.

East Asia, excluding Japan, is the most rapidly growing region in the world, at about 6 percent annually, led by China and Indonesia. China's GDP grew 6.9 percent in 2017, is slowing gradually but, will probably be better than 6 percent annually for the next several years. A major long-run challenge for Japan, the U.S., and indeed everyone, is how to deal with China, both as an aspiring regional hegemon and as a global economic competitor in trade and foreign direct investment. Increasing access to China's restricted domestic markets provides opportunities.

With good growth and trade, some commodity prices have increased, but inflation is not a global problem. Crude oil prices, a significant indicator substantively and symbolically, rose 6.5 percent in the first half of 2018, averaging \$65 per barrel. The World Bank forecasts \$69 per barrel in 2019. Other commodities are relatively stable, too. Still, all sorts of events can undermine these and other forecasts.

It is important to focus on the Trump administration's policies and actions and not become sidetracked by Trump's tweeting and rhetoric. It is incorrect to think of Trump simply as an idiosyncratic, unique phenomenon. He was elected because his anti-free trade, anti-Washington establishment, anti-diversity, anti-immigrant views are supported by many Americans. Many feel the benefits of U.S. global leadership do not outweigh the costs. This is a difficult reality that everyone has to deal with.

Trump's policies, in attacking open trade, multilateral trade agreements, the WTO, and other international institutions, are a mistake. His strategy is to force trade concessions country by country, by unilateral impositions of tariffs on substantial imports, starting with 25 percent on steel imports and 10 percent on aluminum based on the Section 232 national security clause, and by direct bilateral negotiations with allies, as well as with China.

Trump's major instrumental economic goal is to reduce the U.S. trade deficit to zero, even though it is a reasonable 2.5 percent of GDP, down from a peak of 5.8 percent in 2006. The dollar is the major international currency, so the U.S. needs to run modest current account deficits (goods and services) in its balance of payments in order to supply the international financial system the dollars needed to finance trade and foreign direct investment (FDI).

Bilateral trade balances are a bad objective; in an effective international trading system, countries desirably will have trade deficits with some countries and surpluses with others.

Trump apparently narrowly evaluates the effectiveness of his trade policy. He considers himself a winner in negotiations with South Korea, the European Union, Mexico, and Canada—all have made modest concessions.

The rules-based international economic system does need updating, particularly in light of digital technology and e-commerce, but it is basically sound. Trump's attacks are undermining it, and in the process they are calling into question the reliability and vitality of U.S. leadership of the international economic order. While the direct effects of the U.S. tariffs so far are not severe, if they are applied to automobiles and auto parts, the adverse consequences will be major. Not only will trade be directly affected, but currently good international production supply chains will be restructured in less efficient ways.

Trump has importantly pursued his bilateral approach in developing new negotiations with China and, separately but interestingly, with North Korea. The Trump-Kim meeting in Singapore in June has broken the long stalemate in U.S.-North Korean relations, with the possibility of eventual North Korean denuclearization, its focus on economic development, and the ending of U.S., Japanese, and other sanctions in North Korean trade and economic interactions. However, I do not expect significant results from the off-and-on discussion anytime soon, if at all.

The evolving U.S.-China relationship is the most important issue, not only for both countries, but for Japan and the global order as well. China is the globe's rising superpower, with an authoritarian political system, and a protected domestic economy. The ways in which China obtains foreign commercial technology is a major issue. One way is simply theft without compensation; that is subject to legal and other proceedings. More important for firms doing business with and investing in China are requirements that they have Chinese corporate partners with which they must share valuable technology.

Trump has focused on the reality that by far the biggest U.S. bilateral trade deficit is with

China, some \$375.4 billion in 2017. Trump has imposed 25 percent tariffs on \$50 billion of imports from China, based on intellectual property violations. Starting on September 24, Trump directed the United States Trade Representative to impose a 10 percent tariff on a further \$200 billion of imports from China, and to increase it to 25 percent beginning January 1, 2019. If China retaliates, the U.S. will impose tariffs on a further \$269 billion of imports from China. China has retaliated, but U.S. imports from China in 2017 of \$505.5 billion are almost four times as much as China's \$129.9 billion imports from the United States. This is the world's biggest trade issue in late 2018. These skirmishes could lead to a trade war.

U.S.-Japan Economic Relations

Prime Minister Abe and President Trump met on September 27, 2018, and agreed to enter negotiations for a United States-Japan Trade Agreement. This was a major change. For two years the U.S. had pressed for a bilateral agreement and Japan had strongly resisted, pursuing its multilateral policy. Trump's threat to impose tariffs on imports of Japanese motor vehicles apparently carried the day. Ongoing negotiations have now entered a new phase, as they continue at the highest bureaucratic level, with U.S. Trade Representative Robert Lighthizer and Japanese Economic Revitalization Minister Toshimitsu Motegi handling this negotiation. The U.S.-Japan Economic Council committee meets regularly with its Japanese business counterpart, the Japan.-U.S. Economic Council.

Trump's international economic policies have put Japan in a bind and have created new opportunities and responsibilities as well. For its security, Japan relies on its tight alliance with the U.S. It has little to contribute independently to security in East Asia, even though it is a major economic player. This will not change significantly, even if Abe succeeds in revising Article 9 of the Japanese Constitution.

The U.S.-Japan relationship is multidimensional, close, strong, very good, and taken for granted by both countries. The U.S.-Japan Security Treaty is the foundation of the alliance. Most media coverage focuses on official bilateral economic negotiations.

Japan is America's third largest trading partner. The U.S. is Japan's second largest, after China. Japanese company direct investments in the U.S. totaled \$449 billion as of 2017, and Japanese asset managers hold much more in American financial assets. And American institutions are major holders of Japanese stock and other financial assets, though it is difficult to estimate the actual amounts. In 2017 about 3.8 million Japanese visited the U.S. (including 1.5 million going to Hawaii) as tourists or for business reasons, and 1.4 million U.S. residents visited Japan. Americans and Japanese are friendly with each other.

Abe has assiduously developed a good personal relationship with Trump, with regular meetings and frequent phone calls. Nonetheless, Abe's September 27 capitulation to open bilateral trade negotiations casts their relationship in a new light. Until now, much has apparently been on security issues, particularly maintaining sanctions against North Korea. In addition to North Korean denuclearization, in their discussions, Abe has succeeded in obtaining Trump's support for Abe's politically important North Korean abductee issue.

In the 1970s and 1980s, 17 or so Japanese were abducted from Japan by North Korea, as admitted by North Korea's premier Kim Jong-II in 2002. Five were soon returned; Kim stated the other 12 were deceased, but without further information or return of remains. In his last election campaign, Abe stated that North Korea should carry out a fully transparent resolution of the fate of these abductees. Abe then succeeded in having Trump announce in June that North Korea should fully address the abductees issue. It is not clear how the issue can be resolved to Japan's satisfaction. One proposal is for a delegation of Japanese officials to conduct a fact-finding mission in North Korea. This complicates Japan's participation in the U.S.-led regional negotiations to denuclearize North Korea.

At their summit meeting in April, Abe and Trump agreed to hold new high-level discussions on trade. To the surprise of its negotiators, Japan was included in the group of countries subject to the U.S. steel and aluminum tariffs. They apparently believed the good Abe-Trump relationship would offset Trump's focus on the trade deficit. American companies hurt by tariff-induced rising costs can appeal for exceptions, and on June 20 the Commerce Department exempted some limited Japanese steel products from the tariffs at the request of seven American company users.

Beef is a good example of the specifics of U.S.-Japan trade negotiations. Japanese consumption of beef is increasing about 6 percent a year, as incomes rise and tastes evolve. Japanese farmers produce about 40 percent of this, but the share and amount will continue to decline as elderly farmers retire and domestic herds shrink. Australia provided about 32 percent and the U.S. 25 percent of Japanese beef consumption in 2017. Japan is the largest importer of U.S. beef. However, with the U.S. withdrawal from TPP, the current import tariff of 38.5 percent will continue, while Australia's membership in CPTPP means that Japan's tariff on Australian beef will very gradually decrease to 9 percent.

Moreover, in retaliation against U.S. protectionist tariff measures, China and Canada have imposed additional tariffs on U.S. beef. Trump is trying to mollify the dissatisfaction of U.S. beef producers by providing up to \$12 billion in aid to farmers hit by retaliatory tariffs.

Free Trade Agreements

Free trade agreements (FTAs) reduce tariffs and other import barriers but do not eliminate them. They typically embody a wide range of regulatory rules and harmonization efforts to reduce trade costs, including intellectual property rights, dispute settlement mechanisms, labor standards, health and safety rules, and direct investment measures. To a considerable degree, they reflect the interests of multilateral organizations, large pharmaceutical companies and other intellectual property owners (especially "content providers" and entertainment-related firms), international financial institutions, and other powerful organizations.

On net balance, most trade agreements are good—they enhance the welfare of the participating countries. However, Trump champions an extreme version of "fair trade," deeming existing trade agreements to be bad and thus to be done away with. This is not surprising, given his strong preference for bilateral trade negotiations and deals, exemplified by his withdrawal of the United States from the TPP agreement as one of his first acts as president, and now the bilateral trade negotiations.

Trump's withdrawal from TPP (originally the 12-member Trans-Pacific Partnership) put Japan in a bind. Despite its large share of world trade, Japan has not been a "leader." Now, from being a somewhat reluctant late member of TPP-12, Japan has been suddenly called on to take leadership of the partnership. In March, the remaining 11 members agreed to continue as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). Two-thirds of the CPTPP's 30 chapters are identical to TPP, but 22 provisions that were important primarily to the U.S. were suspended or changed. On July 6, Japan became the second country to ratify CPTPP; once six members do so, the agreement will go into effect, presumably in early 2019. A major objective of Japan is to persuade the U.S. to rejoin. That is unlikely under the Trump administration.

The CPTPP partners are interested in accepting new members, not just other Asian countries, but also from elsewhere. Japan has welcomed the United Kingdom, which has expressed its desire to become a member; that presumably would take place only after the Brexit process is worked out.

In reaction to Trump's trade policy, the Abe administration's trade negotiations with the European Union took on a new importance and urgency. On July 17, Japan signed the Japan-EU Economic Partnership Agreement, which eliminates most tariffs, including Japanese tariffs on European cheese, wine, and several other agricultural products. The EU eliminated its import tariffs on Japanese automobiles and reduced tariffs on auto parts to 3 percent. At the signing ceremony in Tokyo Abe stressed the role of Japan and the EU as "champions of free trade at a time when protectionism has spread," a nice dig at U.S. protectionist policies.

The U.S. withdrawal from TPP has given new impetus for Japan to take an active role in negotiating the ASEAN-initiated, rulesbased Regional Comprehensive Economic Partnership (RCEP). The 16 members of RCEP importantly include China, India, and South Korea, in addition to the 10 Southeast Asian nations, Australia, and New Zealand. RCEP is less stringent than the CPTPP and focuses more narrowly on market access and rules for trade, excluding CPTPP's standards on labor and environmental protection. RCEP negotiations have been bumpy, with no settlement since discussions first began in 2011. The policy positions reflect the overwhelming diversity of policies among its members. Australia and New Zealand propose high levels of liberalization; India strongly opposes. As the two leaders, Japan and China will have to work together to support RCEP. The ASEAN members are also pushing for acceptance as one means of holding ASEAN together.

The Economy

Japan's GDP for fiscal 2017 was ¥548.7 trillion (\$4,988 billion at 110 yen/dollar). The share of consumption in GDP continued to decrease slightly to 55.4 percent from its 59.1 percent peak in 2013. Led by the private sector, investment continues to be important; the gross fixed capital formation share was 24.1 percent, having changed little over the past decade. And Japan is an even greater net saver, providing 4.0 percent of its GDP in 2017 to the rest of the world in loans and investments. Japan has persistently run a current account surplus, supported by the substantial increase in dividends and interest from its foreign assets. Japan is the world's largest holder of net foreign assets at \$3 trillion, making the government's official foreign exchange reserves \$1.259 trillion.

After eight quarters of real GDP growth, in the first quarter of 2018, a slump in personal consumption and housing investment resulted in a decline of 0.9 percent in GDP (seasonally adjusted annual rate), because of heavy snows, slower housing investment, and initial consumer reactions to business efforts to raise prices. This decline occurred despite small increases in business investment and government demand, and a rise in exports and the balance of payments current account surplus. The second quarter performance, however, did even better than expected, suggesting the first quarter was only a onequarter blip. GDP grew at 1.9 percent in the April-June quarter, led by a 2.8 percent increase in consumption and 5.2 percent in business investment.

Demography, urbanization, and evolving values have substantially changed the way Japanese live. Of the 53.3 million households in 2015, 28.9 percent were married with children, down from 37.3 percent in 1990; 20.1 percent were married couples without children, up from 15.5 percent; 7.6 percent were mothers with children, up from 5.7; and 34.6 percent were one-person households, up from 23.1 percent. One of the biggest changes is that more married women have been reentering the labor force, hiring domestics, and relying a bit on husbands, a significant lifestyle change in more highly educated, better-off families.

Nature mostly is kind, but in summer 2018 it was unkind to Japan, with earthquakes, typhoons, and bad weather. In early July, western Japan was flooded by unprecedented torrential rains, causing major landslides and killing 225 people, and had significant household and infrastructure damage. It was the worst weather disaster in 36 years. That disaster was followed by a deadly record-high heat wave lasting for several weeks, which caused about 160 deaths, particularly of older Japanese. Electricity prices shot up because air conditioning is now common, and thousands were taken to hospitals for heat-related reasons. On September 4, Typhoon Jebi hit western Japan, with high winds and further flooding, including the Kansai International Airport, which had to close down, stranding 3,000 travelers. And then on September 6, Hokkaido suffered its strongest earthquake since 1996. Electricity was cut to all 2.95 million households. Backup generators maintained power at 250 hospitals, since it took several days to

restore power to most users. It was a miserable summer for all too many Japanese.

The official and private sector forecasts expect growth to continue but slow down to a more normal rate. The Bank of Japan (BOJ) forecast continues to be at about 0.8 percent for fiscal 2019 and fiscal 2020, the Ministry of Finance (MOF) at 1.1 percent. (The fiscal year ends in March of the following calendar year.) The World Bank more cautiously forecasts 2020 growth at only 0.5 percent, the lower band of the estimated potential growth rate. There are two major concerns. The first is about the effect of the legislated increase in the consumption (value added) tax from 8 percent to 10 percent in October 2019. The Abe administration has already begun the process of spending twothirds of this forthcoming revenue increase on new children and welfare programs, rather than paying down the high government debt, as envisaged earlier. The second major concern is how seriously Trump's protectionist trade and other economic policies will hurt Japan.

Urban real estate prices rose about 3 percent in 2017. Tokyo is enjoying a boom in commercial properties and hotels. Foreign tourism is one driver. Foreign businesses invested an estimated \$12 billion in Japanese real estate. Rents in Tokyo's five central wards are the highest since the boom ending in 2009. The 2020 Olympics and Paralympics are additional generators of real estate projects.

In contrast, one dismaying reality is that Japan has so many empty, uninhabited, deteriorating houses and properties, not only in regard to farms, but also notably in urban areas. Early postwar regulations to stimulate construction by taxing unused urban land without a structure at six times the rate of land with a house or building now are a severe disincentive for owners to demolish their disintegrating buildings. About a quarter of the 8 million unoccupied properties has been deserted, neither for sale nor for rent. Often the ownership cannot be determined; the earlier owners are dead, with no heir, or heirs that cannot be reached. Even in Tokyo, where 70 percent live in apartments, one in ten houses are empty, a higher ratio than in New York, London, or Paris. The best thing would be for local urban governments to tear these structures down and use the land as small parks or other public spaces, but the legal system does not make that readily possible.

Productivity and Innovation

The key to per capita GDP growth and to economic well-being is productivity, the increase in real output of goods and services (GDP) per hour worked. Productivity growth has slowed in the past two decades in Japan and in most developed countries, although the degree of slowdown has been overestimated because of measurement difficulties. In the longer run, productivity growth depends on investment, including both physical capital and improvements in skills, as well as changes in technology.

Japan's labor productivity in 2017 was only about 65 percent that of the U.S. and Germany, and 10 percentage points below the U.K., Italy, and Canada. Japan's labor productivity growth rate between 2000 and 2017 was 1.26 percent, equal to that of Germany and more than the U.S., and substantially better than the other countries. Japan has a well-educated and skilled labor force, a substantial stock of machinery, equipment, and other capital goods. Gross fixed capital formation has increased since 2010 and in 2017 was 23.9 percent of GDP. Its technology capabilities are strong.

Why Japan's productivity is not higher is a

puzzle. Only part of the answer lies in measurement problems. The output of services is measured to a substantial degree by prices. Japanese have high quality services in retail trade and in restaurants and accommodations, but their labor skills are ubiquitous among Japanese, so wages are low, and prices are low. And when low-skilled, foreign workers take these kinds of jobs at even lower wages, measured output and productivity fall.

Innovation is the key to Japanese future productivity growth. Japan ranks sixth in the Bloomberg 2018 Innovation Index, behind South Korea, Sweden, Singapore, Germany, and Switzerland, but ahead of the United States (11th). Japan ranks high in R&D expenditures and marketing value-added, but low (34th) in services sector efficiency and productivity (24th). In the multicountry system of protecting patents, Japan had the third largest filings for patents, 48,208 in 2017, slightly below China; the U.S. was first, with 50,624 filings. Of the 917,725 persons engaged in research, 60 percent are in companies and 36 percent in universities.

Japanese productivity will rise as advances in artificial intelligence (AI), machine learning, and the use of the huge amounts of information in the Big Data sector continue. Japan has near universal cell-phone coverage—the World Bank estimates 133 phones per 100 persons. Virtually all Japanese between 13 and 50 years old use the internet. It starts with first graders entering school. Perhaps not surprisingly, less than half of those 70 and older use the internet.

The range of effects and implications of contemporary technological change are almost overwhelming—robotics, fintech, analysis of human genomes, cybersecurity, and (loss of) privacy. Some Japanese companies have been lagging in adjusting to these realities and in taking advantage of the opportunities they create. In July, the Japanese government released a new strategy to strengthen Japan's cybersecurity. Given Japan's performance over the past 150 years, I am optimistic about Japan's ability to incorporate these technologies, to continue to improve its economic situation, and to make further improvements in its regulatory apparatus.

The Corporate Sector

Japan has 958,292 incorporated business enterprises. Many own subsidiaries, so there are 3.3 million corporate entities, which employ 51.0 million people, about 91 percent of those working. Another 5.7 million are individual proprietorships, many in agriculture. Almost all corporate enterprises are small, with paid-in capital of 10 to 100 million yen. There are 27,215 medium-sized enterprises (capital of 100 to 1,000 million yen), and 5,929 large enterprises (capital of 1 billion yen or more). One-third of large enterprises are in manufacturing. The corporate sector produces the most output and provides the most jobs; it excludes most agriculture and some professionals, such as doctors and consultants, and unincorporated small enterprises.

As of August 2018, 3,628 Japanese companies were listed on a stock exchange, 2,103 on the first section of the major exchanges, and 500 on the second section. Listed firms produce about 45 percent of total output and provide 30 percent of employment. Listed companies have to make public a great deal of information. They are the focus of corporate governance and other policy concerns. They provide useful, albeit partial, stereotypes of ownership, management autonomy and behavior, and terms of employment. One surprise is that only three-fifths of the large enterprises with capital of at least 1 billion yen are listed. My guess: many are private companies that own buildings and other real estate.

Even though it is changing, one traditional stereotype is that of the Japanese salaryman. He is hired by his company on graduation from school as a full-time regular employee for his entire career until retirement at age 60. He participates in the company's seniority-based system of compensation and promotion. He marries and has two children. His wife does not work at all, or only part-time. Implicitly, most are hired for the management track, though male clerks are salarymen too. Though they have similar job security and other conditions. blue-collar workers are not part of the salaryman image. In fact, this salaryman stereotype never applied to more than a small proportion of the labor force, and its fundamental features have evolved. Now women graduates are salarymen. Permanent employment is no longer perceived as absolutely guaranteed. The retirement age is being increased. Nonetheless, this view of the structure of large-firm employment persists, and so does the reality.

Corporate profits have increased significantly from 48.5 trillion yen in fiscal 2002 to 83.6 trillion in fiscal 2017, and corporate cash holdings from retained earnings are huge. Listed companies have responded to pressure to increase return on equity (ROE), now about 9.2 percent, but they are still below their counterparts in the U.S. and Europe. One of the responses of entrenched management has been to increase dividends and payout ratios. Another has been to sell stilllarge cross-share holdings with affiliates. A third has been to divest noncore activities. Both Japanese and foreign capital management firms are active buyers in this growing market, including such well-known American firms as KKR and Elliot Management Corp.

Given the employment system, senior management in large firms is deeply entrenched. director committees do not play a major role. Half (52 percent) of the compensation committees meet only once or twice a year, as do almost half (46 percent) of the nominations committees. A usual board meeting lasts less than two hours (90 percent of meetings); 55 percent take an hour or less. The biggest change in the male-dominated management system is the hiring of female college graduates into the management-track cohort and their promotion to higher positions, but this is a slow process. Corporate governance reform, an Abe objective, has made gradual progress. It is impraces in how companies have responded

In a February 2018 survey, a METI report

suggests that in many companies, board of

impressive how companies have responded to pressures to have at least two independent outside members of the board. In 2011, only 15 percent of first section companies had two or more independent directors. As of 2017, only 12 of the 2,610 companies on the first and second sections had no outside directors; 90 percent had two or more. Not all outside directors are independent, but 86.4 percent have two or more independent directors. The 2014 Stewardship Code, revised in 2017, which embodies principles for corporate governance reform, continues to have more institutions signed on, and they do so with FSA and stock exchange encouragement. One hundred sixty-six asset management companies have signed on, 6 trust banks, 22 insurance companies, and now 32 pension funds and corporate pension plans, breaking through earlier resistance.

The Japan Exchange Group (JPX), which owns the Tokyo Stock Exchange (TSE) and other major Japanese exchanges, strongly encourages its listed companies to comply with the 2015 Corporate Governance Code. As of July 2017, 26 percent of the companies complied with all 73 principles, and 63 percent with 90 percent or more; 74.1 percent of the companies provided reasons for not complying with specific principles. Not surprisingly, compliance is higher for companies listed on the TSE first section than on the second section, which consists of smaller companies. To what extent these principles are being applied in practice is not clear.

SMEs (small and medium enterprises) are a fundamental strength of the Japanese economy. (There are statutory definitions of what an SME is. The criteria relate to employment size and capital and vary by industry, with trade and services having lower upper limits than manufacturing and other activities.) SMEs are in all sectors, industries, and occupations. They generate 55 percent of corporate output and provide 70 percent of employment. They encompass a wide variety of firms and activities in manufacturing and services. They provide goods and services in supply chains to larger companies, including exports; they engage in major retail and wholesale activities; and they provide professional services. SMEs have their less obvious weaknesses. A hard-to-estimate but significant number are zombie firms, avoiding bankruptcy only because their banks and other creditors do not want to record losses, or the elderly owner-managers are hanging on by slowly drawing down family assets.

It is difficult to know much about SMEs because they are privately owned. It is relatively easy for them to provide misleading data. Cash is still widely used in Japan; currency in circulation in March was 19.8 percent of GDP, higher than most advanced countries. The financial statements of small enterprises, both in manufacturing and services, indicate they always have been substantially less profitable than similar large firms. This is partly because they are less efficient and do not achieve economies of scale. They often do not have access to, and cannot afford to hire, the best workers. Very good SMEs typically are guiet about their success, though locally everyone knows who

they are. They pay their owner-managers high wages and bonuses. Most small enterprises do not pay corporate profit taxes.

The most comprehensive data on enterprise entry and exit are for establishments with employees, identified as paying employee insurance. During fiscal 2016, 119,780 enterprises were established, and 75,307 exited. This is presumably comparable to the 5.2 percent entry rate and 3.8 percent exit rate in fiscal 2015 of all establishments. Only 8,446 firms in 2016 went through formal bankruptcy. A different source indicates that profitable enterprises closed (or were sold) because of the owner-managers' age, of whom four-fifths were 60 or older.

The founders of successful SMEs that are 5 to 10 years old typically had substantial work experience before establishing their company: 30 percent are in their 50s and 26 percent in their 40s. SMEs have greater difficulty in hiring than large enterprises, and they rely more on women and older workers. They have benefitted from the increases in the numbers of married women returning to the labor market, and older workers continuing after their retirement from larger companies. But as slack is more fully absorbed, SMEs suffer labor shortages, already a major complaint.

A major problem for successful SMEs is succession of leadership. Many are led by their now-elderly founder or his elderly successor. Particularly in small towns and local areas, ambitious young people leave to take advantage of opportunities in the Tokyo or Osaka areas. With no heirs to take over the company, current top management has to train a worthy successor, sell to a large firm or another SME, or close.

To survive, SMEs must adjust to changes in the nature and structure of their economic environment. Small mom-and-pop retail stores and restaurants are being replaced by chains of convenience stores and fast-food chains. Domestic supply chains are being replaced by foreign supply chains. Large firms invest more abroad than at home.

Twice a year I go to Japan and spend several days in some local area, meeting with local companies. Many robustly provide services specific to their local customers; others have a strong technology or a very specific product, even leading to significant global market share. Yet many are led by strong entrepreneurs. All have very good, extensive relationships with their local business and broader community. They are respected. They will persevere.

Labor

As of June 2018, Japan's labor force was 68.6 million, of whom 66.9 million were working, primarily as employees. Males numbered 34.3 million (97.4 percent employed), females 30.2 million (97.6 percent employed). Major concerns are differences in specific labor markets for regular and nonregular employees and for males and females. Men are paid more and treated better than women. The 35.0 million regular employees have substantially higher wages and better benefits than the 21.0 million nonregular employees who are contract, part-time, or temporary workers.

Between 2012 and 2017, the number of Japanese of standard working age (15–64) decreased by 4.5 million, but the labor force increased by 1.6 million and those working by 2.5 million. Some 8.1 million Japanese, 23 percent of those 65 and over, continue in the labor force. The participation rate of those in the working age group, notably among women, has risen.

Almost 71 percent of married women are working. The participation rate for working

age females rose from 76.4 percent in 2010 to 80.2 percent in 2016. With more married women soon reentering the labor force after their children are born, the traditional M-shaped participation rate by age—in which there is a significant drop between ages 25 and 40—has almost disappeared.

Japanese men on average earn about 25 percent more than women, substantially greater than the average for OECD countries of just under 15 percent. In part this is because 77.6 percent of men are regular employees, while only 44.8 percent of women are. Regular full-time employees receive significantly higher wages than nonregular workers, especially part-time workers. Work/nonwork patterns are different for most men and women at all working ages.

Women much more than men have the responsibility of being the caregivers for their children, as well as caring for both their own and their husbands' parents. Accordingly, they seek employment with shorter working hours, limits on overtime, and greater flexibility in their time off from work to handle family emergencies.

As a result, women are often in low-paying occupations and jobs. They comprise half of workers in the service sector. In 2017, females were 75 percent of the labor force in medical, health care and welfare; 61 percent in accommodation and restaurants; 59 percent in the charmingly-titled living-related and personal business and amusement services; 58 percent in education; and 51 percent in wholesale and retail trade. They were only 27 percent of workers in government. Women comprised 68 percent of service workers, 60 percent of clerical workers, and (to my surprise) 47 percent of professional and engineering workers.

Although Japanese women continue to be discriminated against by the way specific labor markets are structured, the discrimination has been gradually lessening. Thus, wages and incomes in the same specific profession or job apparently are not very different by gender; at this fundamental micro level, the labor market apparently works relatively effectively. However, women do not have equal access to high-income occupations; working long hours until late in the evening has been a predominant feature of the male-oriented, managerial culture of large firms.

One of Japan's surprises is that wages and cash earnings until recently have barely risen, only 0.4 percent in 2017, less than the 0.6 percent increase in the CPI. The spring 2018 wage offensive negotiations resulted in an increase for all enterprises as of July of 2.07 percent, slightly better than the 1.98 percent in 2017; the increase for SMEs was 2.02 percent, up from 1.87 percent.

Aggregate data always mask differences by industry, location, and a range of other specific variations. With tight labor markets, some companies have promoted some contract employees to regular staff, although at lower wages than other regular employees. A 2017 survey indicates that 14.3 percent of nonregular workers want full-time regular positions. So the supply of regular workers is not tight. Regular employees are concerned about the long-run survival of their company, and even the unions and their voice, RENGO, have not pushed for wage increases.

The hourly wages for nonregular workers are market and location sensitive. In 2017, the average hourly wages were ¥1,154 for men, an increase of 1.8 percent, and for women ¥1,074, a 1.9 percent increase. Age counts more for men than for women. Men aged 40-44 were paid 21 percent more than men aged 20-24; for women the peak was at 35-39, 12 percent higher than the 20-24 group. At their respective peaks, men were paid 11 percent more than women, presumably because of job differences.

The monthly starting salaries for new male university graduates in 2017 was ¥207,800, 3.0 percent higher than in 2012. Female graduates in 2017 started at ¥204,100, 3.9 percent above 2012. Over the past two decades, the male-female starting-wage gap has narrowed slightly, but it has always been small. These gender differences in starting wages are also true for new high school graduates. Educational attainment is important. In 2017, the male high school graduate's starting wages was 79.0 percent of a male university graduate; for females 77.5 percent. As length of service increases, the gender-wage differential widens significantly.

Summer and winter bonuses are a major component of total remuneration of employees, particularly in large enterprises, but in SMEs as well. The bonus is calculated in terms of the number of months of scheduled wages it relates to. The general level is traditionally formulaic, but there is some flexibility based on a company's current performance. The winter 2017 bonuses for major enterprises was equal to 2.43 months of salary; the summer 2018 bonus was 2.44 months, essentially unchanged from the previous year.

Japan ranks 21st of 159 countries in the UN gender inequality index, and a startling 114 of 144 in the World Economic Forum's gender gap index. Abe has addressed this in his program of womenomics, to increase Japanese female labor force participation and to increase the very low numbers of women in responsible positions in both the private and public sectors. As part of this program, there is even a minister for gender equality. However, the womenomics policy aims to get more women to work and increase the GDP growth rate. It does not focus on gender discrimination and equality. How deeply rooted Japanese behavior and institutions are, and the attention now

directed at them by the media, has been reflected in the embarrassing disclosure on August 2 that Tokyo Medical University had been systematically discriminating against female applicants to keep their level at about 30 percent, probably since 2010.

Abe's target of increasing the share of women in leadership positions to 30 percent by 2020 is unrealistically ambitious for positions even in government and politics. Only 10 percent of Diet members are women, and the level is similarly low in local elective bodies. There are no women in 32 percent of town and village assemblies. Only 10.3 percent of section managers in Japanese companies are women, primarily in family-owned corporations. Only 3.7 percent of executives in listed companies are female, far below other OECD countries.

One notable aspect of Japanese malebased corporate work culture has been the very long hours white-collar workers spend at work, often to 9:00 p.m. or later. While declining over time, in 2016 some 15 percent of men in their 30s and 40s worked more than 60 hours a week. Bringing an end to such overwork, as it is termed, has become an important issue in the current labor market environment. Young men think quite differently from their grandfathers. Working late is inconsistent with womenomics; and it probably is not very productive. Indeed, firms that have regular white-collar workers leave work some two hours earlier than before have apparently not suffered a decline in output. Shorter hours have presumably led employees to work a bit harder and more efficiently, and to spend less time in meetings. These increases in productivity per hour are real but difficult to determine, in part because white-collar output is difficult to measure.

I do not expect the hours Japanese are at work will decrease to U.S., much less to European, levels, legally or de facto. The Diet in June passed legislation capping allowable overtime hours at a lenient 100 a month, and 80 hours on an average of several months.

Foreign workers play a limited role in Japan. In 2017, Japan had 1.279 million foreign workers, an increase of 18 percent over 2016, but only 2.0 percent of the total labor force. About 497,000 foreign workers are permanent residents or spouses of permanent residents. From 2012 to 2017, Japan had an inflow of 2.5 million foreign workers. Most returned home after their contracts expired. Seventy-one percent were students, in intern training programs, or professional and technical specialists. Almost all foreign workers are Asian-29 percent from China, 19 percent from Vietnam, and 11 percent from the Philippines. Brazilians of Japanese extraction, more important earlier on, are now 9 percent of the total.

Most foreign workers are not immigrants. They are on three- to five-year contracts that can be extended, but they cannot readily become permanent residents. Of Japan's total population of 126.7 million, 2.6 million (2.0 percent) are foreign residents. Japanese realize they need foreign workers, especially for low-skilled, low-wage jobs, and they are generally accepted, if not warmly welcomed. However, as an ethnically homogenous people with their own language and a deep culture, Japanese are not willing to accept large numbers of foreigners as permanent residents. The immediate challenge of labor shortages can be handled by encouraging even more elderly and married women to work, and by continuing the policy of moderate increases in foreign workers.

Government Economic Policy

By many measures, the Japanese economy is doing well: full employment, reasonably good growth, and an ending of deflation. However, Abenomics, now in its sixth year, has yet to achieve its three ambitious major goals. Price stability, defined as a 2 percent annual increase in the CPI, remains far more difficult to achieve, despite the continuation of the Bank of Japan's very easy monetary policy as Governor Haruhiko Kuroda began his second five-year term in 2018. Fiscal stability, measured as ending deficit spending and achieving a government's budget primary balance of zero, has been further postponed to 2025 at the earliest. Structural reforms through deregulation and other measures proceed, but slowly due to the opposition of powerful vested interests. The 2 percent GDP growth target by 2025 is unrealistically optimistic; the baseline case projects growth at about 1.2 percent to 2025 and 1.1 percent in 2027. The government optimistically continues to pursue price and fiscal stability, while developing a focus on achieving faster growth through continued technological advance. In November 2017, the government announced its New Economic Policy Package, with a major focus on productivity improvement though further regulatory changes, and the promoting of knowledge (a wonderfully vague term). In May 2018, METI presented its internal policy proposal to the Industrial Structural Council general meeting, focusing on open innovation, a rules-based leading strategy to oppose protectionist measures (in reaction to Trump), and revitalization of SMEs (domestic policies, including inbound tourism). Flagship projects include driverless cars by 2020 and a nationwide health care information network to make available individual health records and medical histories. It will take some years for these policies to be accepted and implemented. Key will be constructive business responses to the challenges and opportunities of the digital revolution.

Monetary Policy

That the BOJ's sustained extraordinary easy monetary policy has yet to succeed in raising the CPI to a 2 percent rate has been a dismaying reality. At least it has succeeded in bringing CPI decreases to an end. Monetary policy has been steady, strong, and reliably predictable. However, Japanese expectations, based on surveys of financial market participants, firms, economists, and households, are that prices will increase only about 1.2 to 1.3 percent annually over the next 5 to 10 years. Probably the scheduled increase in the consumption tax from 8 to 10 percent in October 2019 is one reason for the low forecast. Another is global price stability, rather than inflation. A third may be lack of optimism about Japan's economic future.

The BOJ, which for some years had repeatedly announced that its 2 percent target would be achieved within two years, no longer sets a date. The forecast of its Monetary Policy Board for 2020 is 1.6 percent, with four members forecasting a rate below that and only one above at 1.9 percent.

The BOJ's basic implementation of its very easy monetary policy with negative shortterm interest rates and very low longer-term rates has not changed. Its negative interest rate since January 2016 on a limited proportion of commercial bank deposits in the BOJ has sustained the overnight call rate at a minus 0.07 percent in June, and three-month and six-month treasury bill rate at minus 0.13 percent. Newly issued 20 year Japanese government bonds (JBGs) in June yielded 0.495 percent.

The BOJ tweaked its policy in its July 30-31 meeting by slightly widening the range of fluctuations in 10-year JGB yields, and by increasing the weight of stock market exchange traded funds (ETFs) to include the TOPIX stock market index (capitalization-weighted, it includes all companies listed on the first section of the Tokyo Stock Exchange in its purchase of ETFs).

Governor Kuroda at the press conference following the meeting indicated the upper limit to the 10-year JGB yield will be about 0.2 percent.

Japan's super-easy monetary policy will persist so long as consumer prices do not rise. The great uncertainty is when labor markets will become sufficiently tight that firms will raise wages and prices. This continues to be Japan's great macroeconomic challenge.

The sustained low interest rate policy adversely affects Japanese banks. Banks have substantially more deposits than they can lend, even at very low rates; and despite their low rates, they do not have enough creditworthy domestic borrowers. They are gradually relaxing their credit criteria, and loans are now increasing. Many inefficient local banks have merged; those remaining continue to adjust their business models in order to survive.

Now-rising U.S. interest rates mean that purchase of U.S. Treasuries and other financial assets are attractive. It is notable that Japan Post Bank, the world's largest deposit-taker, from March 2007 to March 2018 reduced its holdings of JGBs from 88 percent of its portfolio to about 30 percent, and its investment in foreign securities went from 0.1 percent to 28.5 percent.

The major commercial banks and regional banks during this period also purchased foreign financial assets, notably bonds. However, as the U.S. Federal Reserve Board implements its policy of increasing interest rates, Japanese (and all) holders of U.S. Treasury and other financial claims are subject to paper losses as bond prices decline. Selling to take smaller losses now on some foreign bonds, as Japanese regional banks did in the second quarter of 2018, reflects an ongoing portfolio composition challenge for asset managers.

Fiscal Policy

Central and local government expenditures were 39.5 percent of GDP in fiscal 2017. This figure includes social security expenditures equal to 23.8 percent of GDP and interest costs on 2.9 percent.

The central government has a strong bureaucracy that budgets the funding for the wide range of standard services-education, the national health system, welfare, and national security. Defense expenditures will continue to be about 1 percent of GDP as Japan depends on its alliance with the United States. Of the government's fiscal 2018 general accounts budget of 97.7 trillion yen (17.5 percent of projected GDP), onethird (33.7 percent) is for social security, mainly pensions, medical care, and long-term care. The assumption (value-added) tax will increase in October 2019 from 8 to 10 percent, as already legislated. However, food is excluded from the increased tax, so the actual tax increase on consumption will be about 1.5 percent.

Increases in welfare costs are a major concern. With an increasing elderly population, particularly with a significant increase in those 75 and older starting in 2022, by 2025 medical care costs are projected to rise by 50 percent and long-term health care by 140 percent, resulting in a projection that total social security expenditures will account for 24.4 percent of GDP. Either welfare benefits will have to be reduced, or taxes increased beyond the consumption tax hike in October 2019. This intergenerational policy challenge will not be resolved soon.

Japan's key macroeconomic policy challenge

for the past two decades has been that private sector demand has fallen well short of private savings, so the government has had to provide fiscal stimulus through deficit financing. The fiscal 2018 budget is for 97.7 trillion yen expenditures and 64.1 trillion yen of tax and other revenues. The shortfall is covered by new government bond issue of 33.7 trillion yen, only slightly less than in the 2017 budget.

Accordingly, the budget primary balance is a negative 2.9 percent of GDP in 2018. While the Abe administration had projected the budget primary balances deficit to be reduced to zero by 2020, that target has been delayed to 2025, using very optimistic assumptions about nominal GDP growth. The target will not be reached.

One group of specialists is deeply concerned that Japan will have a fiscal crisis because gross government debt is 253 percent of GDP, far higher than that of other advanced countries, and because fiscal deficits and further government bond issues persist. In their view, Japanese and other holders of JGBs will come to believe that the government will not be able to service its debt, much less pay it down. In contrast, another group argues that Japan needs more fiscal stimulus to achieve more rapid growth, since the high government debt ratio is not a serious problem.

There are four ways for Japan to reduce its ratio of government debt to GDP. Two will not happen in Japan: very high inflation to reduce the real value of JGBs and government default. The other two are to run a fiscal surplus and to raise real GDP growth. To run a fiscal surplus makes sense only if private aggregate demand is so strong that fiscal stimulus is no longer necessary. However, a fiscal surplus can only be achieved if taxes are increased. With increasing social security expenditures, some tax hikes are necessary, but always are politically difficult. Increasing the GDP growth rate is certainly desirable, but that will not happen, since the labor supply will decrease.

The high government debt ratio will persist, but I optimistically believe that well before it becomes an insurmountable problem, the government will adjust its economic policy. This is the view reflected in Japanese financial markets. The interest rate in JGBs continues to be below that of U.S. Treasuries. Japan is a safe haven. It will continue to be so.

Foreign Economic Relations

Japan is necessarily a major player in the world economy, given its size, virtual absence of natural resources other than agricultural land, and saving higher than domestic investment. It is the world's fifth largest importer of goods and services, and fourth largest exporter. Japan's largest trading partner, with \$129 billion in total trade, is the United States. Japan's second largest, at \$120 billion, is China. Japan is the second largest foreign direct investor in the U.S., after the U.K. Japanese automobile firms produce twice as many cars in the U.S. as they export to the U.S. from Japan.

Merchandise exports increased 10.8 percent in fiscal 2017, contributing 14.4 percent to GDP. Though slightly less at 14.0 percent of GDP, imports increased even faster at 13.7 percent. Reflecting foreign growth, machinery and other capital goods exports increased significantly. About 40 percent of merchandise imports are food, energy, and other natural resources.

As already discussed, Japan is playing a leadership role in a number of free trade agreements, notably TPP-11 and RCEP. Much depends on the course of Trump's trade policy toward Japan.

Japanese companies, with huge cash holdings, have invested more abroad than at home. They have developed extensive production supply chain operations, notably to the U.S. and China. Automobiles are the prime example. Japan outward FDI in 2017 was the second largest (after the U.S.), amounting to \$160 billion (up from \$145 billion in 2016). Cumulative investment in the U.S. is valued at \$469 billion, 11.6 percent of the total; in China the total is \$118 billion, plus another \$29 billion in Hong Kong.

Investing has its challenges. In the U.S., Trump's protectionist actions and threats raise the costs of Japanese individual goods suppliers in Mexico, Canada, or elsewhere. In China, it is a combination of rising labor costs and more-intrusive Chinese government policies that make it a less attractive location for new FDI.

Japan's stock of FDI in 2017 was 30.1 percent of its GNP. Given its early history of restrictions, the stock of foreign direct investment in Japan is 4.1 percent of its GDP. Japan is not among the top 20 recipients of FDI inflows. The U.S. is the largest recipient, but flows dropped 40 percent from 2016 to 2017. OECD data indicate a global fall in FDI of 18 percent, and 24 percent from the 2015 postrecession high.

Japan has a well-developed tourist industry, with a wide range of good hotels, other accommodations, restaurants, and other facilities, and excellent trains and other travel services throughout the country. Two-thirds of the tourists in Japan are Japanese visiting other parts of their own country. I focus here on foreign tourists coming to Japan, since the numbers have increased dramatically: 27.8 million in 2017, up from 5.2 million in 2003. Tourists will increasingly flow into Japan for the 2020 Tokyo Olympics.

For foreigners visiting Japan for the first time, it can be a good, eye-opening experience, helping to improve bilateral relations at a person-to-person level, despite language barriers. Most of the foreign visitors are Asian, since they are relatively nearby and may have relatives living in Japan. That is probably why visitors from South Korea were 24.9 percent of the total, and Taiwan 15.9 percent. Nonetheless, visitors from China continue to be the most, at 25.6 percent. Japan, particularly the ski slopes in Hokkaido, attracted 33,900 Australians; while they were only 1.7 percent of the foreign visitors, they were the biggest spenders per capita. Chinese were second; in addition to gifts to take home, they bought high-quality rice and other foodstuffs, since these are even more expensive in China. However, when the yen strengthened in 2016, foreign spending, not surprisingly, temporarily declined.

Working with local government, the central government actively promotes foreign tourism, with a target of 40 million by 2020. Japan now hosts a wide range of business and other international conferences. Tourist visas have become easier to obtain, and the Japanese travel agency business is buoyant.

Energy

Energy has long been Japan's greatest economic vulnerability. It has to import all its oil and natural gas. In 2017, these comprised 89.7 percent of Japan's total energy consumption.

Hydroelectric provided 3.9 percent, other renewables (solar and wind predominantly) continue to increase, and together were 4.9 percent. Nuclear is only 1.4 percent. Japan is the world's fifth largest consumer of energy, but 32nd on a per capita basis. Oil is the largest energy source (41.3 percent in 2017), followed by coal (26.4 percent) and natural gas (22.1 percent). Rapid technological change is a key feature of the energy industry. However, because installed capacity has such a long life, under normal circumstances it takes years for the distribution of sources to change significantly, and in the shorter term the process is erratic.

Japan is the world's third largest consumer of oil, but far smaller than the U.S. and China; its global share was 4.1 percent in 2017. Oil consumption decreased 2.5 percent annually over 2006-2016. In contrast, natural gas (LNG) consumption has increased at a 2.5 percent annual rate; Japan globally is the sixth largest consumer, at 3.2 percent in 2017. Coal is dirty but cheap for electric power generation, and higher quality coal is essential for steel production. Coal consumption between 2006 and 2016 increased at a 0.6 percent annual rate, despite environmental policies. In 2017, Japan was the third largest coal user, but its 3.2 percent global share was eclipsed by China at 50.7 percent and the U.S. at 8.9 percent. However, Japan is the only G-7 country planning new coalbased power plants, with 15 under construction and 17 in the planning stages; its new technology substantially reduces but does not eliminate CO₂ emissions.

While oil consumption by vehicles is a major energy consumer, attention appropriately focuses on electric power, since it can be generated by every energy source. Rapidly changing technologies and costs put pressure on electricity producers and government policymakers.

While Japanese electricity consumption increased 2.0 percent in 2017, it decreased at a 1.5 percent annual rate between 2008 and 2016, attesting to conservation by users. In 2017, 39.4 percent of Japan's electricity was generated by LNG, 33.6 percent by coal, 7.8 percent by hydroelectric, and 9.7 percent by other renewables combined.

Nuclear energy is a major political issue, particularly following the earthquake in 2011 that severely damaged the Fukushima nuclear plant, leading to the closing of all nuclear reactors. Nuclear power is relatively efficient, and it does not emit carbons, but many Japanese fear other accidents. New, stringent safety rules were established, and 9 of the 40 commercially operable nuclear plant centers have been relicensed. Nuclear power operation increased in 2017 once six plants resumed operations. Two and possibly three more plants are scheduled to resume operations by the end of 2018. Over the next few years, the major question is how many more of the existing plants will be approved and reopened. The long-run issue is whether to install the new nuclear technologies that are smaller scale and more efficient, or to forgo the use of nuclear power.

Renewables are increasing rapidly, at a 12.5 percent annual rate since 2016, but still constitute only a minor share of Japan's energy consumption. Costs have continued to drop significantly, and they are becoming competitive with building new coal and gas electric power plants. Technology improvements have cut solar costs by 28.5 percent for every doubling of PV (photovoltaic) capacity, and wind costs have been going down at about 10 percent annually.

Within a decade, wind and solar are expected to be a cheaper source of electricity than existing plants, and sooner than that for older plants. Solar and wind will eventually play a major, but not overwhelming, role in Japan's energy future unless inexpensive energy storage systems become available. Japanese electricity consumption is greater in the evening than in daytime, but the sun is down, and winds are erratic.

So far, lithium-ion batteries are the main way to store electricity generated by renewables. Significant improvements in technology have reduced their cost by 80 percent since 2010, and their costs will continue to drop. Within another decade or so, small, efficient solid-state batteries or other new types of batteries will presumably replace lithium-ion batteries.

Poverty

Most Japanese have safe, comfortable, stable lives. They live in a prosperous country, ranking in the middle of the 34 OECD advanced countries. Still, poverty continues to be a significant reality. Data on poverty are less comprehensive than for most other economic topics, and, as in all types of estimations, there are measurement issues. Poverty is the consequence of complex interactions among economic, social, family, and personal circumstances. There is no single major cause. Having been raised in a poor family is one factor, especially if parents have not been positively involved. Native ability and motivation are important. As our emphasis on education suggests, not much attention is paid to those Japanese who do poorly in school, or do not complete high school. They are the marginal, the powerless, the ignored.

In its economic as well as other dimensions, poverty is relative; only a small number of Japanese are absolutely destitute. An estimated 16 percent of Japan's population (about 20 million) are in relative poverty, using the OECD definition of having an income less than half the national median income. Most in relative poverty are either elderly individuals or single women with children.

The elderly in rural areas have better social safety nets than those in large urban areas. Those living in small rural villages can move to retirement housing and related facilities, including medical care, in nearby towns. Poor elderly single or widowed men in cities are a particularly at risk. Government programs, including free medical care and long-term care, help make their lives better. Almost all poverty-stricken women with children were once married but are now spouseless—divorced or abandoned. Most work. About 7 percent of women with regular jobs live in poverty, and 6 percent of men. Of women in nonregular jobs, 30 percent in the 25-34 age group are in poverty, rising to 52 percent for those 30-44.

Food insecurity is a problem for poverty-stricken people. In a 2012 survey, 14.8 percent of respondents indicated that in the past year there had been times when they were unable to provide food for their family. The private food bank Second Harvest Japan estimates that of the 2.3 million they deal with who are worried about having sufficient food, the elderly comprised 70 percent, single-mother households 20 percent, foreign households 9.8 percent, and 0.2 percent homeless.

Private charitable contributions supplement government welfare programs in a range of fields. Japan has 40 food banks, which collect food from corporations to distribute to orphanages and other welfare institutions, individual programs for poor mothers and their children. Another type of volunteer program makes free or inexpensive children's meals available, mostly once or twice a month, and some daily on school days. There are more than 2,200 such local organizations.

Early in the postwar period, Japan established what came to be termed the Six Welfare Laws: helping the physically disabled, the mentally disabled, the elderly, children, single parents (mostly mothers) with children, and those widowed. The Abe administration has sustained government welfare programs, and Abe has committed the 2019 expected revenue increases to nursery school and other child welfare programs. National health care and education programs are inclusive; they are central in alleviating poverty. In its meritocratic society, education is the major way by which Japanese can become more successful. Education is the main escape route for poor children. Education is compulsory through age 15, and most continue in regular or technical (vocational) high schools. But to escape, poor children have to do reasonably well. Subsequent formal and informal on-the-job programs help. Ability, occupation, and lifestyle also determine whether young Japanese escape poverty. Nonetheless, since poverty is a relative concept, it may decline in absolute severity but will not disappear, as even the most welfare-advanced Scandinavian countries demonstrate.

Conclusion

Japan has a strong, well-performing economy in a domestic environment that is both safe and economically, politically, and culturally stable. Its basic assets are its people and its accumulated capital. Japanese are well-educated, skillful, diligent, hardworking, pragmatic, and comfortably ambitious. They make me optimistic about Japan's future. Japan has a large capital stock. Physical capital includes housing, fixtures, buildings, roads, and other infrastructure. More broadly defined, capital includes Japan's high level of technology and its strong economic, social, and other institutions.

Japan is the world's third-largest economy, a major trader and investor in the international economic system, and a model of successful economic performance. Why does its economy no longer attract so much general interest? This is partly because it is politically and economically stable and relatively predictable, particularly in contrast to the dramatic rise of China. Another is because not enough attention is paid to Japan as a leader in the inevitable demographic transition in advanced countries to an aging and declining population. Perhaps most importantly, East Asia's political and security uncertainties and anxieties—the rise of North Korea as a security threat and the implications of the rise of China as a regional hegemon—appropriately warrant more attention and concern than Japan's economy.

The Japanese economy has four puzzles that I have not fully addressed. Why is Japanese productivity only 65 percent of that in the U.S.? How do we accurately measure output and productivity in a service-based internet, smartphone, digitalized economy? Why is there full employment, yet wages for regular workers are barely increasing? Why, despite many years of effort, the extraordinarily easy monetary policy, and ongoing government budget deficits, has the targeted 2 percent annual increase in the CPI not been achieved?

In the foreseeable future, Japan's greatest challenge is how to adjust well to its demographic transition to a smaller and older population. So far it has done pretty well. Two foreign challenges are how to deal with a rising China and an ongoing reduction of the hegemonic power of the U.S. Yet Japan's greatest threat is the risk of a massive earthquake destroying much of the Tokyo or Osaka areas. This has been true throughout Japanese history, and the country has recovered in every instance. Climate change poses new challenges-the millennia of warming since the last ice age, which helped make modern civilization possible, is now seen as a threat, as well as an abuse of human stewardship to the extent it is produced by human activity.

In the very long run, Japanese, like most humans, will live longer and better because of improvements in medical and other technologies. I optimistically believe humans— Japanese, Americans, everyone—are smart enough, flexible enough, and able to organize themselves well enough that our great-, great-, great-grandchildren will thrive.

October 8, 2018

Current Research Highlights



From left to right: David E. Weinstein, Gerald L. Curtis, Merit E. Janow, Takatoshi Ito

CJEB places high priority in promoting research related to the Japanese economy, businesses, management systems, and financial markets. Typically, the Center's core faculty members obtain funding individually through competitive outside grants, as well as additional financial and administrative support from the Center in order to facilitate their research.

David E. Weinstein leads the Center's research activities and has several individual projects under way supported in part by the National Science Foundation (NSF), the Institute for New Economic Thinking (INET), and a Google Research Grant. Professor Weinstein's research and teaching focus on international economics, macroeconomics, corporate finance, the Japanese economy, and industrial policy. In addition to his role as CJEB's director of research, he is the director of the NBER Japan Project, and the executive director of the Program for Economic Research in the Department of Economics at Columbia. Professor Weinstein was also the chair of Columbia University's Department of Economics.

In 2017–2018, Professor Weinstein continued his research on systemic financial risk in Japan. He has a major project underway that aims to illustrate how banking crises affect aggregate investment. This paper, which was published in April 2018 in *The Journal* of *Political Economy*, shows how problems in individual banks result in aggregate loan volatility and investment. He is also working on a project with the Bank of International Settlements on the global demand and supply of bank credit, which uses confidential banking data to understand the global transmission of banking system shocks.

In addition, Professor Weinstein has been working on understanding the fiscal problems that Japan is facing and why they have not resulted in a crisis. This research aims to better understand how Japan has managed its demographic transition.

Professor Weinstein has also been working with data from Rakuten to analyze the impact of ecommerce on prices and employment in Japan and is researching how barcode and other big data sources can be used to understand firm, price, and macroeconomic dynamics. He has a project that uses confidential Census trade transactions data to understand trade patterns in general and the sources of Chinese success in international markets.

Professor Weinstein's research is often cited and discussed in the media, and he is a frequent commentator on Japan.

Gerald L. Curtis's main research includes the evolution of and future prospects for Japan's political system and foreign policy. In this regard, he has traveled extensively throughout East and Southeast Asia. He is a frequent speaker at think tanks, universities, business and financial organizations in the United States, Australia, China, Korea, and Europe, and is a participant in numerous track two policy dialogues with and in Japan, China, Taiwan, Korea, and the United States. In addition to his academic writings, he regularly publishes op-eds for *The Wall Street Journal*, the *Financial Times*, and numerous publications in Japan and elsewhere. He is a frequent guest on Japan's Sunday morning news programs and is widely quoted by international media outlets on issues relating to Japanese politics and society and U.S. foreign policy.

Takatoshi Ito contributes to the Center's research activities and has several individual ongoing research projects. Professor Ito's research and teaching focus on international finance, foreign exchange market microstructure, Asian financial markets, inflation targeting, and the Japanese economy. Professor Ito also maintains a teaching and research position during the summer at the National Graduate Institute for Policy Studies in Tokyo. He has carried out a series of research projects on the dynamics of the exchange rates in various time spans and frequencies. He has done macroeconomic analysis of the yen/ dollar exchange rates after the rate floated in 1973. Currently, he is examining the microstructure of the foreign exchange markets using a tick-by-tick dataset, which contains all firm quotes and deals in a computerized

order-matching engine. He is researching how particular institutions and rules in the market influence pricing and deal activities.

His work on the Japanese economy includes both macro- and microeconomic aspects of the economy. On monetary policy, he was a proponent of inflation targeting in Japan, long before the Bank of Japan finally adopted it in 2013. He is investigating transmission channels and the effects of quantitative easing adopted by the four major central banks. On fiscal policy, he has been analyzing the debt sustainability of Japanese government debts. He has been conducting a simulation analysis of a menu of fiscal consolidation with varying degrees and speeds. On growth strategy, he investigates various reform plans in regulated industries from agriculture and education to medical and health care. He combines theory and empirical research and derives policy implications.

He belongs to a research group at the Research Institute of Economy, Trade, and Industry, which examines Japanese exporters' decisions to pass through the exchange rate changes on export and destination prices. He is also a special member of the Council on Customs, Tariff, Foreign Exchange, and other Transactions at the Ministry of Finance, Japan. Professor Ito organizes internationally acclaimed seminars, such as the NBER East Asian Seminar on Economics in June 2016.

He served as chair of the study group on reforming public pension funds in Japan. A report from his group, recommending portfolio rebalancing away from Japanese government bonds and toward more risk assets, has been very influential in the subsequent change of the Government Public Investment Fund.

Professor Ito's involvement in Southeast and East Asian economies dates from the time of the Asian currency crisis in 1997–1998. He has done research on, as well as given policy advice related to, economic and financial issues in Southeast Asia, in particular Thailand, Indonesia, Korea, and Myanmar. He continues to visit these countries to engage in academic and policy discussions. He has been doing research, as well as teaching, on inflation targeting and exchange rate regime and financial and capital markets development in the Asian emerging market economies.

Merit E. Janow, appointed dean of the School of International and Public Affairs (SIPA) in 2013, undertakes research on international trade, finance and investment, the digital economy, and the intersection of those areas in Japan and China. Over the past three years, she has spoken to international corporate, academic, and policy audiences on topics including financial regulatory reform in the United States, developments in international trade and investment, comparing Chinese and Japanese industrial policies and policies around high tech and digital, and corporate governance issues. As dean, she also has initiated a number of new initiatives around the intersection of technology and policy, notably focusing on cybersecurity, internet governance, and digital economy; a major China/Asia initiative; new initiatives on central banking and financial policy; and global urban policy.

Curtis J. Milhaupt's most recent publications are "Bonded to the State: A Network Perspective on China's Corporate Debt Market" (Journal of Financial Regulation); "Governance Challenges of Listed State-Owned Enterprises Around the World" (Cornell International Law Journal); and "Evaluating Abe's Third Arrow: How Significant are Japan's Recent Corporate Governance Reforms?" (Journal of Japanese Law, forthcoming).

Alicia Ogawa continues her private consulting work on Japan's politics and economy. During the past year, she has published several papers on Japan's Corporate Governance and Stewardship reforms, available on the CJEB website. She has been a featured speaker on corporate governance at several NPOs this year, including the American Chamber of Commerce in Japan, the Council of Institutional Investors, the Japan Securities Dealers Association, and the International Corporate Governance Network. The Project on Japanese Corporate Governance and Stewardship organized several events at Columbia this year, including a debate between Michael Garland of the NYC Comptroller's Office and Ken Hokugo of Japan's Pension Fund Association on the role public pensions play in promoting better corporate governance.

Hugh Patrick continues his study of Japan's current economic performance, monetary policy, and institutional changes. His most recent paper is his annual essay on the current Japanese economy, included in this annual report, starting on p. 10. He is an active participant in a range of conferences about Japan and Asia. He made trips to Japan in fall 2017 and spring 2018, and to Korea in spring 2018, and had meetings with senior policy advisers and business leaders.

Faculty Engagement



Richard Clarida speaking at PPPSF conference

CJEB actively supports Columbia University faculty members who are not formally associated with the Center by promoting dialogue between the business, professional, academic, and cultural communities in the United States and Japan. CJEB funds Japan-related research and explores ways to incorporate the study of the Japanese economy and business systems into faculty research and teaching. We foster collaboration and use our extensive network of Japanese professional contacts to arrange for speakers from the private, academic, and government sectors to give lectures to the Columbia community. CJEB faculty have access through CJEB to various Japan-related databases for use in their research. Additionally, where appropriate, CJEB can fund and arrange faculty trips to Japan.

This past year, CJEB invited several faculty members to participate as speakers or

panelists in its various public programs. On September 21, 2017, CJEB cosponsored a lecture with the APEC Study Center, the School of International and Public Affairs, and the Weatherhead East Asian Institute (WEAI) of Columbia University featuring His Excellency Tarō Kōno, foreign minister of Japan (p. 39). The lecture, titled "His Excellency Tarō Kōno, Japan's New Foreign Minister: A Dialogue with Columbia Students about Diplomacy," opened with remarks by Gerald L. Curtis, Burgess Professor Emeritus of Political Science at Columbia University and was moderated by Takako Hikotani, Gerald L. Curtis Associate Professor of Modern Japanese Politics and Foreign Policy at Columbia University. On November 13, 2017, CJEB also cohosted a lecture with WEAI featuring Gerald L. Curtis and Takatoshi Ito, titled "Japan's General Election: What Happened and What it Means" (p. 40). Professors Curtis and Ito shared their perspectives on Japan's snap election and the political and economic implications to follow.

On November 21, 2017, CJEB cosponsored a symposium with NHK (Japan Broadcasting Corporation) on the topic of the Trump administration's economic policies and its implications for Japan and Asia (p. 37). This symposium brought together four distinguished economists from Columbia University, including **Glenn Hubbard**, dean of Columbia Business School and Russell L. Carson Professor of Finance and Economics: and Joseph E. Stiglitz, University Professor at Columbia University. This symposium was later broadcast on NHK World's Global Agenda program on December 15, 2017. CJEB also held its annual Japan Economic Seminar (p. 58) on February 16, 2018, highlighting several papers on the Japanese economy. CBS professor Patrick Bolton

was a discussant for the paper "The Decline in Bank-Led Corporate Restructuring in Japan: 1981-2010," written by Takeo Hoshi, Henri and Tomoye Takahashi Senior Fellow of the Walter H. Shorenstein Asia-Pacific Research Center at Stanford University. Donald Davis, professor at Columbia University's Department of Economics, also served as a discussant for the paper "Identifying Neighborhood Effects among Firms: Evidence from Location Lotteries of the Tokyo Tsukiji Fish Market," written and presented by Kensuke Teshima, assistant professor at the Centro de Investigación Económica Instituto Tecnológico Autónomo de México (ITAM).

CJEB hosted its second annual Conference on Public Pension and Sovereign Funds on February 26, 2018, where **Richard**

Clarida, C. Lowell Harriss Professor of Economics and Professor of International and Public Affairs at Columbia University, moderated the session "Macro Environment and Challenges to Long-Term Investors" (p. 30). On April 16, 2018, CJEB hosted the symposium "Central Bank International Cooperation and Coordination," where Patricia Mosser. director of the Initiative on Central Banking and Financial Policy at SIPA, gave opening remarks (p. 38). On May 27, 2018, CJEB hosted a special educational summit for its corporate sponsors and quests, titled "Demystifying Blockchain and Cryptocurrencies" (p. 45). The summit was taught and designed by R. A. Farrokhnia, adjunct associate professor at Columbia Business and Engineering Schools. On the following day, CJEB also organized its annual Tokyo conference, "Japan as a Leading Power: Trade and the Fintech Revolution" (p. 33). Several notable Columbia faculty members participated in this conference, including **Merit E. Janow**, dean of SIPA; **Shang-Jin Wei**, N. T. Wang Professor of Chinese Business and Economy at Columbia University; and **R. A. Farrokhnia**.

CJEB continues to work with the Jerome A. Chazen Institute for Global Business and CBS's student-run Japan Business Association (JBA) to support the annual travel of a CBS faculty leader on the Chazen International Study Tour to Japan. In spring 2018, **Brett Martin**, adjunct assistant professor of business at CBS, led the study tour.



From left to right: Hugh Patrick, Glenn Hubbard, Joseph Stiglitz, David E. Weinstein, and Takatoshi Ito

Research Paper Series

CJEB fosters dissemination of research on Japan's economy and business within Columbia and in the broader academic, business, professional, and public policy communities. While much of the research produced by scholars affiliated with the Center ultimately appears in scholarly books and professional journals, early drafts of the work and research results can be found in CJEB's Working Paper (WP) Series. We also accept interesting, topical papers not slated for eventual publication in our Occasional Paper (OP) Series. Papers in both series are available for free download through our website at www.gsb.columbia.edu/cjeb/research, which links to the Columbia University Libraries' Academic Commons website.

2017-2018 Working Papers

WP 360

Difficulties and Challenges: Japan's Postwar History of Economic Trends and Monetary Policy

Yoshio Suzuki

August 2017

This is a summary paper of Yoshio Suzuki's book in Japanese, Difficulties and Challenges, Japan's Postwar History of Monetary Policy and Economic Trends (Iwanami Shoten, 2016). For the Bank of Japan, these 70 years are indeed a repetitive succession of difficulties and challenges, and resulting successes and failures. The first difficulty was pursuing two contradictory policy purposes, namely stimulating investments to restore supply capacity and depressing hyperinflation more than 300 percent under a fixed exchange rate in the Occupation period. Unexpectedly, an enormous increase in external demand generated by the Korean War in 1950-1951 solved the dilemma and the

prewar level of the Japanese economy was restored in 1953. The successful catch-up story of extraordinary rapid growth started thanks to the Bretton Woods System under which free trade, capital, and technology transfer enabled Japan to perform export-investment led high growth and helped the country to achieve industrialization around 1970. Then three surprise shocks came from abroad: the so-called Nixon shock followed by the Smithsonian Accord in 1971; the Plaza Accord and Louvre Accord in 1985-1987; and the Lehman shock in 2008. Each shock caused sharp appreciation of the yen, but the economic implications from each are different. The essence of the first is a correction of the depreciated yen under the fixed nominal exchange rate system in which the effective real rate of the yen had been in a depreciating trend because of the inflation rate differential between Japan and abroad. Japan's policy reaction was so extreme as to cause domestic inflation, which further flared in the first oil crisis. The second shock would have been also smaller if the binding of Japanese monetary policy by participating in the so-called "International Policy Coordination" program had not caused asset bubbles as the consequence of an internationally-compelled easy money policy. The third was a real shock because it spoiled the successful exit from deflation and turned "the loss of 7 years" to "15 years." The story of successful "Stronger Country" Japan in 1975-1984 and the failure of too hasty fiscal consolidation in 1997, which resulted in extended deflation, are also discussed. As for today's monetary policy, since the final goal of full employment is almost achieved, pursuing an intermediate target of 2 percent inflation rate is meaningless, and the BOJ should start the exit policy. A positive immigration policy to increase Japan's working population is also proposed to raise the potential growth rate and the natural rate of interest to recover the effectiveness of monetary policy.

WP 361

The Crisis that Wasn't: How Japan Has Avoided a Bond Market Panic

Mark T. Greenan, Staff Associate, Columbia University Department of Economics

David E. Weinstein, Carl S. Shoup Professor of the Japanese Economy, Columbia University; Director of Research, CJEB

November 2017

This paper explores the history of Japanese fiscal policy over the past two decades with the aim of understanding better where previous forecasts have erred. As such, Japan provides an important case study of how a country facing intense fiscal pressures can avoid hyperinflation or financial panic. We find that there were three key forces that likely improved Japan's fiscal situation relative to more pessimistic predictions. First, the Japanese government has shown a remarkable ability to hold down per capita expenditures on social pensions and health care. Second, the Japanese government has been able to raise taxes substantially. Third, the remarkable monetary policy pursued by the Bank of Japan has resulted in a dramatic decline in the amount of government bonds held by the private sector.

WP 362

The Federal Reserve in the Shadow of the Bank of Japan

Thomas F. Cargill, Professor of Economics Emeritus, University of Nevada, Reno

Gerald P. O'Driscoll Jr., Senior Fellow, Cato Institute, Washington, D.C.

November 2017

Many commentators on Federal Reserve policy over the past decade devote little attention to the experience of other central banks

and especially the experience of Japan and the Bank of Japan. In fact, there is very little that is new in the U.S. situation that had not already been experienced by Japan and the Bank of Japan more than a decade earlier. Many commentators view Federal Reserve policy as unique and special with regard to other central banks; however, the differences between the financial and economic stress experienced by Japan and the United States pale in comparison to the similarities. In many respects, the Federal Reserve is in the shadow of Bank of Japan, and a better understanding of the comparative records of the two central banks offers important insight into central bank policy. The paper explores three aspects of the relationship between the Bank of Japan and the Federal Reserve. First, the asset bubbles and bursting of those bubbles in Japan (1985 to 1991) and the United States (2001 to 2006) were both the result of central bank policy errors, combined with a flawed financial structure. Second, the political economy of the operating environment of the Bank of Japan and the Federal Reserve ensures continued suboptimal monetary policy regardless of institutional redesigns of the central bank. Third, the Bank of Japan and the Federal Reserve together present a serious contradiction to the conventional wisdom that legal independence is the foundation for optimal central bank policy outcomes. A concluding section brings together the main points of the discussion. These suggest that a better understanding of Federal Reserve policy since the beginning of the new century might start with a review of Japan and the Bank of Japan.

2017-2018 Occasional Papers

OP 78

Japan's Economy: Moving Along Its Modest Sustainable Growth Path

Hugh Patrick, R. D. Calkins Professor of International Business Emeritus; Director, CJEB

April 2018

Professor Hugh Patrick's annual essay on the Japanese economy is published here as a CJEB Occasional Paper. The essay considers the full breadth and scope of issues facing the Japanese economy today, from political stressors to renewable resources to Japan's aging population to their poverty levels. Professor Patrick describes Japan's economy as continuing to chug along well, with above-potential GDP growth in 2017 that will continue for the coming year or two. In longer-term perspective, the economy is maintaining patterns established several years ago, which he does not find surprising. Above all, he believes Japan's economic success is founded on its well-educated, industrious labor force, high savings and investment rates, and good economic institutions, while its only significant natural resources are land and a four-season climate.

Program on Public Pension and Sovereign Funds

With imposed stress on public pension systems across advanced economies because of the growth in aging populations, many countries have created or reformed public pension funds to finance future shortfalls in pension contributions. Under the guidance of Professor Takatoshi Ito, CJEB established this program in order to examine and conduct extensive research on how public pension funds and sovereign wealth funds should be structured, both in portfolio and governance. The program evaluates public pension fund reforms across Japan and other global economies, with an aim toward deriving lessons for Japan to enhance its Government Pension and Investment Fund (GPIF). Similarly, the GPIF can serve as a model for structuring other public and guasi-public pension funds in Japan and other emerging market economies with the intention of setting up or reforming its own funds.

This year, the PPPSF program held its second annual conference on February 26, 2018



From left to right: Takatoshi Ito, Norihiro Takahashi, Carine Smith Ihenacho, Carol Jeppesen, and Lukasz Pomorski

(see p. 32). The conference was composed of three sessions: "Macro Environment and Challenges to Long-Term Investors," "ESG Investment," and "Infrastructure and Real Assets." The conference also featured two keynote speakers: Jacob J. Lew, former secretary of the Treasury; and the Honorable Yasuhisa Shiozaki, member of the House of Representatives of Japan.

Corporate Governance and Stewardship Program



A Tale of Two Systems: What Went Wrong at Toshiba and Wells Fargo symposium

As a major policy to promote structural reforms. Prime Minister Abe introduced the Corporate Governance Code and the Stewardship Code in order to encourage Japanese firms to innovate and invest, and for shareholders to actively monitor and promote those efforts. The Corporate Governance Code is designed to increase transparency and accountability in Japanese corporate management, and the Stewardship Code is designed to encourage investors to engage in active discussion with their invested companies, in order to guide and accelerate the evolution of Japan's corporate culture. Through a series of public programs and papers led by Alicia Ogawa, this program initially focuses on an analysis of the

governance structure of the most innovative Japanese companies and how it has contributed to their status as leading competitors in the global market. The program's mission is to inspire best practices among other firms in Japan as they consider new approaches to governance.

In 2017-2018, CJEB held three evening symposia for its Corporate Governance and Stewardship Program: "Power to the Pensions! Japanese and NYC Pension Funds as a Force for Good Governance" (p. 36), "A Tale of Two Systems: What Went Wrong at Toshiba and Wells Fargo" (p. 37), and "Changing the Game in Japan's Equity Markets: An Update on Corporate Governance Reforms" (p. 38).

The New Global Financial Architecture

Building on CJEB's "Program on Alternative Investments," which ran successfully from 2002 to 2009, the Center established a program in July 2009 titled "The New Global Financial Architecture" (NGFA). The purpose of the NGFA program is to engage in analytical and policy-oriented evaluations of major global financial and economic issues and regulatory changes through conferences, brainstorming sessions, and research activities, with a major emphasis on Japan.

The program brings together distinguished finance and economics professors at Columbia Business School (CBS) and other parts of the University with scholars and financial market participants in the United States, Japan, Europe, and China. While emphasis is placed on Japan and the United States, the program also concentrates on the broader context of the global financial system and all of its major players. Topics include, but are not limited to, financial system restructuring; development of national and international regulatory systems; effective governance, supervision, and monitoring; the operations of and interactions among specific financial markets; the relationships between finance and the performance of the economy; and the nature and role of government and monetary policies.

The NGFA program began with CJEB's seed funding, and in 2011, Aflac Life Insurance Japan, Ltd. (formerly known as Aflac Japan) became the first sponsor. The Center continues to seek a small number of appropriate sponsors inclined to make significant annual



From left to right: David E. Weinstein, Hugh Patrick, Yasuhisa Shiozaki, and Takatoshi Ito

commitments for three years. We encourage anyone interested in becoming involved in the NGFA program to contact us.

This year, CJEB held a number of NGFA events, including eight at Columbia University: in November 2017, "Japan's Economy and Monetary Policy: 20 Years of Unconventional Monetary Policy" (p. 42); "Japan and the Leadership of the World Trading System" (p. 37) and "Trump's Economic Policies and Their Implications for Japan and Asia" (p. 37); in February 2018, "Japan's Role in East Asian Financial Cooperation," (p. 43) and "Special Lecture with the Honorable Yasuhisa Shiozaki" (p. 40); and, in April 2018, "Changing the Game in Japan's Equity Markets: An Update on Corporate Governance Reforms" (p. 38), "Central Bank International Cooperation and Coordination" (p. 38), and "Fighting to Raise Japan's Inflation Rate" (p. 44). Finally, "Japan as a Leading Power: Trade and the Fintech Revolution" (p. 33) was held as part of the NGFA program in Tokyo in May 2018.

EVENTS

Each year, CJEB organizes and hosts numerous major conferences, symposia, lectures, seminars, and workshops that feature distinguished speakers. These programs provide an important educational platform for students, academics, members of the private sector, and policymakers from Japan and the United States. The 2017-2018 events are listed below and split into the following sections: Conferences, Symposia, Lectures, and Lunchtime Seminars and Workshop. All professional titles listed for participants are accurate for the time of the event. In addition to the descriptions below, videos and reports can be found on CJEB's website: www.gsb.columbia.edu/cjeb.

Conferences



Back row: Christopher Ferrarone, Carine Smith Ihenacho, Lukasz Pomorski, Richard Clarida, Jacob Lew, Yasuhisa Shiozaki, Barry S. Blattman, Carol Jeppesen, Ralph Berg, Norihiro Takahashi. Front row: Takatoshi Ito, Hugh Patrick

Conference on Public Pension and Sovereign Funds

February 26, 2018, The Italian Academy, Columbia University

This was the second annual conference of CJEB's Program on Public Pension and Sovereign Funds (PPPSF). CJEB director Hugh Patrick gave opening remarks and briefly introduced the program. The director of PPPSF, Takatoshi Ito, who is also a professor at the School of International and Public Affairs (SIPA) at Columbia University, followed with more details about the program and its success in the past year and then went on to introduce the three panels. Jacob J. Lew, former secretary of the Treasury, delivered the first keynote speech, which was followed by the first panel, "Macro Environment and Challenges to Long-term Investors." In this session, the panelists discussed their predictions for what the coming year's macroeconomic trends would look like. The Honorable Yasuhisa Shiozaki, member of the House of Representatives of Japan, delivered the second keynote, which was followed by the next panel, "ESG Investment." This panel featured a dialogue on the debates surrounding environmental, social, and governance (ESG) investment issues, which include how ESG is defined, attitudes toward it, and debates on whether ESG investment returns are sustainable and positive for society. In the final panel session, "Infrastructure and Real Assets," the panelists considered different public pension systems around the world and the way infrastructure investment decisions play into their implementation.

Welcoming Remarks

Hugh Patrick, Director, CJEB, Columbia Business School

Takatoshi Ito, Professor, School of International and Public Affairs, Columbia University, and Director, Program on Public Pension and Sovereign Funds, CJEB

Keynote: Jacob J. Lew, Former Secretary of the Treasury; Visiting Professor of International and Public Affairs, School of International and Public Affairs, Columbia University

Keynote: The Honorable Yasuhisa Shiozaki, Member of the House of Representatives of Japan; Former Minister of Health, Labour, and Welfare of Japan

Session 1: Macro Environment and Challenges to Long-term Investors

Moderator: Richard Clarida, C. Lowell Harriss Professor of Economics and Professor of International and Public Affairs, Columbia University

Panelists:

Christopher Ferrarone, Senior Vice President of Economics and Investment Strategy Department, GIC

Jacob J. Lew

Maria Vassalou, Partner, Asset Management, Perella Weinberg Partners

Session 2: ESG Investment

Moderator: Takatoshi Ito

Panelists:

Carol Jeppesen, Senior U.S. Network Manager, United Nations Principles for Responsible Investment

Lukasz Pomorski, Managing Director, AQR



Wendy Cutler and Merit E. Janow



Top row, left to right: R. A. Farrokhnia, Masaaki Tanaka, Shang-Jin Wei, Shujiro Urata, Shotaro Oshima, Naoyuki Iwashita, Noriyuki Yanagawa. Bottom row, left to right: Takatoshi Ito, Merit E. Janow, Hugh Patrick, Wendy Cutler, David E. Weinstein

Carine Smith Ihenacho, Global Head of Ownership Strategies, Norges Bank Investment Management

Norihiro Takahashi, President, Government Pension Investment Fund

Session 3: Infrastructure and Real Assets

Moderator: John Lipsky, Peter G. Peterson Distinguished Scholar at the Henry A. Kissinger Center for Global Affairs, Senior Fellow, Foreign Policy Institute, Johns Hopkins University

Panelists:

Anne Valentine Andrews, Head of Funds Management and Global COO for Real Assets, BlackRock

Ralph Berg, Executive Vice President and Global Head of Infrastructure, OMERS

Barry S. Blattman, Vice Chairman, Brookfield Asset Management

Japan as a Leading Power: Trade and the Fintech Revolution

May 28, 2018; Otemachi Financial City Conference Center, Tokyo, Japan

CJEB presented its annual Tokyo conference featuring business, government, and academic leaders from Japan and the United States.

Wendy Cutler, vice president and managing director of the Washington, D.C., office of the Asia Society Policy Institute and former deputy U.S. trade representative, delivered the keynote address on U.S.-Japan trade relations and trade policy developments under President Trump. Ms. Cutler emphasized the broad differences in each country's approach to trade, contrasting the U.S.'s increasingly protectionist stance to Japan's efforts toward ensuring trade liberalizing measures, such as with the passage of the Trans-Pacific Partnership in the Japanese Diet Lower House. Ms. Cutler described how TPP became a symbol of the growing tensions in U.S.-Japan trade relations, and how tensions between the two countries over disagreements on how to handle trade disagreements

were growing. She concluded by encouraging the U.S. and Japan to reassert their partnership and take joint leadership in global trade relations.

Welcoming Remarks

Hugh Patrick, Director, CJEB

Keynote: Challenges and Opportunities in U.S.-Japan Trade Relations

Speaker: Wendy Cutler, Vice President and Managing Director, Washington, D.C., Office, Asia Society Policy Institute; Former Deputy U.S. Trade Representative

Moderator: Merit E. Janow, Dean, School of International and Public Affairs, Columbia University

Panel I: Challenges for the International Trade System

Panelists:

Merit E. Janow

Shotaro Oshima, Chairman, Institute for International Economic Studies

Shujiro Urata, Dean and Professor, Graduate School of Asia-Pacific Studies, Waseda University





Martin Uribe

Cynthia Balloch

Shang-Jin Wei, N. T. Wang Professor of Chinese Business and Economy, Columbia University; Former Chief Economist, Asian Development Bank

David E. Weinstein, Director of Research, CJEB; Carl S. Shoup Professor of the Japanese Economy, Columbia University

Panel II: Is Fintech a Disruptive Innovation?

Panelists:

R. A. Farrokhnia, Adjunct Associate Professor, Columbia Business and Engineering Schools; Executive Director, Dean's Office, Columbia Business School

Naoyuki Iwashita, Professor, Kyoto University School of Government

Masaaki Tanaka, Senior Global Adviser, PwC International

Noriyuki Yanagawa, Professor, Graduate School of Economics, The University of Tokyo

Moderator: Takatoshi Ito

Closing Remarks

David E. Weinstein

The Japan Project Meeting with Joint ESRI International Conference

July 30–31, 2018; Asian Development Bank Institute, Tokyo, Japan

The Japan Project meeting is held annually by CJEB in partnership with the National Bureau of Economic Research (NBER), the Center for Advanced Research in Finance (CARF) at the University of Tokyo, and the Australia-Japan Research Centre (AJRC) at the Crawford School of Public Policy of the Australian National University (ANU). Professor Weinstein organized this two-day academic conference with Professors Shiro Armstrong of ANU, Charles Horioka of the University of the Philippines, Takeo Hoshi of Stanford University, and Tsutomu Watanabe of the University of Tokyo. The organizers are grateful to the Asian Development Bank Institute for its generous assistance and support.

The ESRI International Conference, sponsored by the Economic and Social Research Institute (ESRI) of the Cabinet office of the Government of Japan, is held jointly with the Japan Project meeting every year. This year's ESRI Conference was titled "Better Measurement for Better Policy Formation."

Please see below for the agendas for both the Japan Project and the ESRI Conference

The Japan Project Meeting

Welcome Remarks

Naoyuki Yoshino, Dean, Asian Development Bank Institute

The Neo-Fisher Effect in the United States and Japan

Author: Martín Uribe, Columbia University and NBER

Discussant: Kosuke Aoki, University of Tokyo

Land Ownership and Development: Evidence from Postwar Japan

Author: Shuhei Kitamura, Osaka University

Discussant: David Albouy, University of Illinois at Urbana-Champaign and NBER
The Samurai Bond: Credit Supply and Economic Growth in Prewar Japan

Authors: Sergi Basco, Universitat Autònoma Barcelona

John P. Tang, Australian National University

Discussant: Stephanie Schmitt-Grohé, Columbia University and NBER

Inflows and Spillovers: Tracing the Impact of Bond Market Liberalization

Author: Cynthia Balloch, Columbia University

Discussant: Takeo Hoshi, Stanford University and NBER

Matching and Agglomeration: Theory and Evidence from Japanese Firm-to-Firm Trade

Author: Yuhei Miyauchi, Massachusetts Institute of Technology

Discussant: Andreas Moxnes, University of Oslo

Free for Children? Patient Cost Sharing and Health Care Utilization

Authors: Toshiaki lizuka, University of Tokyo

Hitoshi Shigeoka, Simon Fraser University and NBER

Discussant: Edward C. Norton, University of Michigan and NBER

ESRI International Conference: "Better Measurement for Better Policy Formation"

Keynote: "Measurement Challenges in Advanced Economies: Learning from Income

and Consumption Trends in the United States"

Kevin Hassett, Chair of the CEA

First Session: Has the business cycle changed after the global financial crisis and what does that imply for business cycle dating?

Chair: Fumihira Nishizaki, ESRI

Presenters: Satoshi Urasawa, ESRI; Makoto Hazama, ESRI

Commentator: Mark Watson, Princeton University

Second Session: Does the growth of the service sector and the digital economy create new measurement challenges?

Chair: Atsushi Seike, ESRI

Presenter: Charles Bean, London School of Economics

Commentator: Kiyohiko Nishimura, Chairman of Statistics Commission

Third Session: What can be done to measure productivity better?

Chair: Anil Kashyap, University of Chicago

Presenter: Chad Syverson, University of Chicago

Commentator: Shigeru Sugihara, Graduate Institute of Policy Studies

Fourth Session: Panel Discussion

Coordinator: Alan Auerbach, University of California

Panelists: Kevin Hassett, CEA; Motoshige Itoh, Gakushuin University; Kiyohiko Nishimura, Statistics Commission; Charles Bean, London School of Economics

Symposia



From left to right: Alicia Ogawa, Michael Garland, and Ken Hokugo

Power to the Pensions! Japanese and NYC Pension Funds as a Force for Good Governance

November 9, 2017; International Affairs Building, Columbia University

On November 9, 2017, CJEB hosted a public event bringing together experts to address the positive impact that institutional investors, particularly pension funds, provide for promoting good corporate governance in the United States and in Japan. This event was part of the CJEB's Corporate Governance and Stewardship Program, an initiative that seeks to analyze the governance structures of the most innovative Japanese companies and aims to use this research to inspire more firms in Japan to adopt best practices in corporate governance. The event featured Michael Garland, assistant comptroller, Corporate Governance and Responsible Investment, at the Office of the New York City Comptroller; and Ken Hokugo '93, director and head of Corporate Governance

and director of Hedge Fund Investments of the Pension Fund Association of Japan. To illustrate the reach and influence that public pension funds can have on shaping corporate governance practices, both Assistant Comptroller Garland and Director Hokugo respectively presented details on the structure and asset allocations of the New York City pension system and the Japanese Pension Fund Association.

Mr. Garland defined good corporate governance as practices that lead to value creation. He emphasized that, at a minimum, "good corporate governance is risk management and ensuring you have your rights when you need them." From the perspective of Mr. Hokugo, good corporate governance is defined by holding a CEO accountable for the return a company earns, a scenario that he does not observe often in Japan. Mr. Garland emphasized the importance of the New York City pension system being a long-term owner in all 10,000 portfolio firms. Nearly 80 percent of New York City Retirement Systems funds are invested through indexed strategies in order to minimize fees and

increase portfolio diversification to meet obligations to pension holders. Due to this investment strategy, Mr. Garland believes, the only way for the New York City pension system to increase the value of its portfolio is to meaningfully engage with its portfolio companies. According to Mr. Hokugo, there is strong cultural resistance, as concepts such as "sustainable growth" and "corporate governance" are dismissed by large, traditional Japanese firms that have flourished for more than two-hundred years. They have a significantly different perspective on the concept of managing corporations from young firms in the United States, for instance, and do not believe that pension funds have sufficient experience to provide them with guidance on management.



From left to right: David E. Weinstein, Taiji Furusawa, Vinod Aggarwal, and Christina Davis



From left to right: Takatoshi Ito, Glenn Hubbard, Hugh Patrick, Joseph Stiglitz, and David E. Weinstein

Japan and the Leadership of the World Trading System

November 10, 2017; Faculty House, Columbia University

Together with the Abe Fellowship Program, a partnership between the Social Sciences Research Council and the Japan Foundation Center for Global Partnership, CJEB hosted this special symposium, featured presentations from and a panel discussion with former Abe Fellows Vinod Aggarwal (UC, Berkeley), Christina Davis (Princeton University), and Taiji Furusawa (Hitotsubashi University). David Weinstein, also a former Abe Fellow, moderated the discussion. Each speaker offered a different perspective, with Professor Furusawa focusing on the conseguences of protectionism on domestic economies, Professor Aggarwal discussing the TPP free trade agreements, and Professor Davis looking at Japan's role as the de facto leader of the TPP in the face of the U.S. withdrawal.

Trump's Economic Policies and Their Implications for Japan and Asia

November 21, 2017; The Italian Academy, Columbia University

CJEB cohosted a symposium on President Donald Trump's economic policies and their implications for Japan and Asia with NHK, Japan's national public broadcasting organization. The symposium brought together four distinguished economists at Columbia University who have been deeply immersed in public policy and who continue to actively influence decision making regarding global and domestic economic policy. The panelists featured at the symposium were Professor Glenn Hubbard, the dean of the Columbia University Graduate School of Business and the Russell L. Carson Professor of Finance and Economics; Professor Joseph E. Stiglitz, recipient of the Nobel Prize in Economics and University Professor, Columbia University; Professor David E. Weinstein, the director of Research at CJEB and the Carl S. Shoup

Professor of the Japanese Economy at Columbia University; and Professor Takatoshi Ito, director of the Program on Public Pension and Sovereign Funds at the CJEB and professor at the Columbia University School of International and Public Affairs. The conversation was wide-ranging, touching on everything from the crisis in North Korea, to Abe's policy of "womenomics," to bilateral free trade agreements, to President Trump's energy policy.

A Tale of Two Systems: What Went Wrong at Toshiba and Wells Fargo

March 22, 2018; Warren Hall, Columbia Business School

CJEB hosted a panel on corporate governance failures, with special attention placed on the cases of Toshiba in Japan and Wells Fargo in the United States. This event was part of the Project on Japanese Corporate Governance and Stewardship, an initiative





From left to right: Hiroshi Nakaso, Guy Debelle, and Simon Potter

Bruce Aronson and Josh Rosner

directed by Alicia Ogawa, an adjunct associate professor at the School of International and Public Affairs. This project is rooted in the importance that Prime Minister of Japan Shinzo Abe has placed on corporate governance reform as a driving factor for revitalizing the Japanese economy. The symposium featured Bruce Aronson, professor of the Business Law Department at Hitotsubashi University; Shane Goodwin, senior fellow and project director at the Richard Paul Richman Center for Business, Law, and Public Policy at Columbia University and former managing director of investment banking (Southwest U.S. Division) at Wells Fargo; and Josh Rosner, managing director at Graham Fisher & Co. The panelists each shared their perspectives on what they believed created the issues that led to the cases of massive corporate fraud at Toshiba and Wells Fargo, with answers ranging from the companies' corporate cultures, to overly aggressive goals of top management, to increased pressures created by sales targets and motivational mechanisms. They also discussed the reforms that were implemented postscandal and how they believed they would impact the area going forward.

Changing the Game in Japan's Equity Markets: An Update on Corporate Governance Reforms

The 19th Annual Mitsui USA Symposium

April 3, 2018; Warren Hall, Columbia Business School

At the 19th Annual Mitsui USA Symposium, Akitsugu Era, director and head of the Investment Stewardship Team at BlackRock Japan, and Ryota Kimura, chief representative and general manager of the New York Representative Office of the Japan Exchange Group, Inc., presented individually on the topic and then participated in a panel discussion led by Alicia Ogawa. Ms. Ogawa, director of CJEB's Project on Japanese Corporate Governance and Stewardship, introduced the two speakers and moderated the discussion. Mr. Kimura connected corporate governance reforms in Japan with Prime Minister Abe's goal of revitalizing the Japanese private sector. Mr. Era gave a detailed account of how BlackRock engages companies in Japan to push for greater transparency and corporate governance reforms. In Japan, the corporate governance code is voluntary under Japanese law, but as the world becomes more competitive and stock exchanges compete for IPOs, the speakers hinted that Japan has to evolve. The challenge, not just for Japan, is in how to maintain high standards of corporate governance without compromising corporate freedom. Another challenge lies in the fact that corporate governance reforms require a more active engagement, which is the complete opposite of the rise in big passive investment funds.

Central Bank International Cooperation and Coordination

April 16, 2018; Uris Hall, Columbia Business School

This special panel discussion featured representatives of prominent banks around the world who convened to discuss the challenges and opportunities currently facing the international banking community. Hiroshi Nakaso, immediate past deputy governor, Bank of Japan; Guy Debelle, deputy governor, Reserve Bank of Australia; Simon Potter, executive vice president, Federal Reserve Bank of New York; and Patricia Mosser,

Lectures

director, Central Banking and Financial Policy at SIPA, all gave presentations and then joined in for a group discussion that covered a few different topics regarding the central banks, including the consequences and implications of central banks printing currency on money markets, the demand for dollars across the globe and its influence on the U.S. domestic economy, and the regulations and laws within the banking community that aim to prevent scandals and ethics violations. The panel also focused on how the current money markets are changing drastically and how that can be tied to tax reforms that are shaping not only domestic but also global financial markets. The growing threat of cyberattacks in this information age and strategies to prevent these emerging risks were also considered.



Tarō Kōno at Columbia University

His Excellency Tarō Kōno, Japan's New Foreign Minister: A Dialogue with Columbia Students about Diplomacy

September 21, 2017; International Affairs Building, Columbia University

In his only public address while in New York for the United Nations General Assembly, Foreign Minister Tarō Kōno delivered remarks centered around Japan's position on the increasingly turbulent world stage. Overall, Minister Kono emphasized the ways in which he would push Japan to take a greater position on the world stage, with plans for Japan to help confront global threats of terrorism and the crisis in the Middle East; turn Asia into a region of peace; and increase institution building efforts, such as working with failed states. His conclusion offered a positive outlook, tempered with realism: he noted that blind optimism is dangerous, and pessimists are usually correct, but optimists are the ones who will bring about change. This event was cosponsored by the Weatherhead East Asia Institute, School of International and Public Affairs, and the APEC Study Center.



The Intergenerational War in Japan: Macroeconomic Burdens of the Demographic Change

October 3, 2017; Davis Auditorium, Columbia University

Takatoshi Ito, professor at SIPA and director of the Program on Public Pension and Sovereign Funds at CJEB, delivered his annual lecture on the Japanese economy, which was divided in two parts: first, a stock-taking of macroeconomic conditions, and second, the main theme of this "intergenerational war." Macroeconomic conditions can be described as "strong real but weak nominal." On the real side, GDP and employment numbers are very strong. However, nominal wages are stagnant and somehow the inflation rate is still far below the 2 percent target. The "intergenerational war" is related to the social security system: currently, retired older generations benefit greatly but at the expense of younger generations. Professor Ito said that he had expected that younger Japanese would rebel against the system and complain to the older generation, but it seems that they have not noticed how disadvantaged they are at this point in time.





From left to right: Takatoshi Ito, Gerald Curtis, and Hugh Patrick

Yasuhisa Shiozaki

The baby boomers are the winning side in this war: they are reaping all of the benefits before the Japanese economy runs out of resources.

Japan's General Election: What Happened and What It Means

November 13, 2017; Faculty House, Columbia University

On November 13, 2017, Professor Gerald L. Curtis, the Burgess Professor of Political Science Emeritus at Columbia University, and Professor Takatoshi Ito, professor of international affairs at the School of International and Public Affairs and director of the Program on Public Pension and Sovereign Funds at CJEB, discussed the October 22, 2017, snap election in Japan. Professor Curtis focused on the political situation and its outcomes: the LDP won, notwithstanding Prime Minister Abe's low popularity. The LDP won because it called a snap election before the Hope Party could get organized and recruit candidates. If the party had been more skillful, it could have caused the LDP

to lose 50 or more seats and possibly force Prime Minister Abe to resign. Professor Ito then discussed the election's economic implications. Prime Minister Abe will need Abenomics to counter the unpopularity that his push for constitutional reform will generate. Professor Ito shared the sentiment that he is more hopeful that Abenomics, with a focus on labor reform and free education at its core, will be pushed to its limits in the next four years. The event was cosponsored by the Weatherhead East Asian Institute and CJEB.

Special Lecture with the Honorable Yasuhisa Shiozaki

February 27, 2018; Faculty House, Columbia University

Yasuhisa Shiozaki, member of the House of Representatives of Japan and former minister of Health, Labor, and Welfare of Japan, gave a special lecture at Columbia Business School on February 27, 2018. He discussed the three major challenges that he understands the Japanese economy is facing: the country's changing demographics, how to manage the increased costs and demands required of the Japanese health care system, and the improvement of corporate governance. He discussed how the Abe administration is pushing for the dynamic engagement of all Japanese citizens since the economy needs diversity to grow, including targeting demographics like the elderly and working mothers. He also underscored the importance of the stewardship code and continued efforts to reform corporate governance.

Special Lecture with Ambassador Reiichiro Takahashi

March 20, 2018; Warren Hall, Columbia Business School

Reiichiro Takahashi, ambassador at the Consul-General of Japan in New York, gave a lecture titled "Japan in the Changing International Community: Challenges and Opportunities" at Columbia Business School, on March 20, 2018. His lecture title well reflected major international issues that Japan faces, and how Japan might deal with them. As a lifelong diplomat, the ambassador

Lunchtime Seminars



From left to right: Reiichiro Takahashi, Koichi Ohara, and Shunichi Homma

has a unique perspective on these issues and offered his insights at this off-the-record lunchtime seminar. Ambassador Takahashi stated that the United States should commit to helping Japan and the Indo-Pacific region as a whole through trade, security, and international cooperation, because that region is where the future of the world economy lies. CJEB organizes a series of lunchtime seminars on campus for students, faculty, and members of the Columbia and New York community. These include *zadankai*, or informal discussions, which involve lengthy question-and-answer periods with the audience and are geared toward presenting new and insightful angles for understanding Japanese business and economic issues. Seminars held in 2017-2018 included:

A Family Business: Tsuchiya's Strategy and History

Zadankai

October 5, 2017; Uris Hall, Columbia Business School

Koichi Ohara '04, President and COO, Tsuchiya Co., Ltd.

Moderator: Hugh Patrick, Director, CJEB

Koichi Ohara '04, president and COO of Tsuchiya Co., Ltd., opened the lecture with a short overview of Tsuchiya as a leading chemical manufacturing company in Japan. Founded in 1950 by Koichi Ohara's grandfather, Kounosuke Ohara, the small family company started as a paint shop and blossomed into a principal company in automotive parts and chemical sales after joining forces with DuPont. Mr. Ohara then discussed the development of its R&D department, core technologies, and various manufacturing bases, demonstrating the many different industries and parts for which Tsuchiya provides supplies and manufacturing. He concluded the lecture by briefly sharing the company's strategy for global expansion and its overseas markets.

How Medical Insurance Works in Japan in Comparison with the U.S.

Zadankai

October 10, 2017; Uris Hall, Columbia Business School

Shunichi Homma, MD, FACC, Margaret Milliken Hatch Professor of Medicine; Deputy Chief, Division of Cardiology, Columbia University Medical Center

Moderator: Hugh Patrick, Director, CJEB





Takako Masai

Shunichi Homma shared his insights on the differences and similarities between the health care systems of the United States and Japan. He started off the lecture by demonstrating the high health care costs in the U.S. compared to Japan and other OECD countries, despite its life expectancy being ranked only 27th in the world. According to Dr. Homma, U.S. health care system costs are driven by factors such as absence of commercial guidelines and price controls, limited competition, and lack of medical service price transparency. Japan, on the other hand, has overall lower health care costs, is ranked second in life expectancy, and is able to cover all its legal residents with insurance. This is partially because Japan places strict price control on health care, which is guided by GDP growth, and costs of care are uniform across providers and locations. Dr. Homma concluded by stating that although Japan has an efficient health care system overall, there are still some shortcomings, including rising costs for an increasingly aging population, a declining rate of full-time employees, and the necessity of improving quality care.

Japan's Economy and Monetary Policy: 20 Years of Unconventional Monetary Policy

Zadankai

November 10, 2017; Warren Hall, Columbia Business School

Takako Masai, Member of the Policy Board, Bank of Japan

Moderator: Takatoshi Ito, School of International and Public Affairs, Columbia University; Director, Program on Public Pension and Sovereign Funds, CJEB

Takako Masai, member of the Policy Board at the Bank of Japan, opened the lecture discussing Japan's current economic outlook, including its growth rate, prices, and labor market conditions. She then explained the history of Japan's monetary policy and the Bank of Japan's direction in developing an unconventional monetary policy during the last 20 years. Ms. Masai concluded by discussing the Bank of Japan's Quantitative and Qualitative Monetary Easing (QQE) policy and its positive effects and challenges.

The Trump Administration's Asia Policy

Zadankai

February 1, 2018; Warren Hall, Columbia University

Glen S. Fukushima, Senior Fellow, Center for American Progress

Moderator: David E. Weinstein, Director for Research, CJEB

Glen S. Fukushima, senior fellow at the Center for American Progress, dissected the first year of Donald Trump's presidency from the point of view of his actions toward Japan, China, Korea, and Asia at large. The event was held by CJEB and was cosponsored by the APEC Study Center and the Japan Study Student Association (JASSA). Mr. Fukushima, who was an adviser on Hillary Clinton's Asia Policy Working Group when she was a presidential candidate. discussed the differences in Secretary Clinton and President Trump's stances on East Asia. Mr. Fukushima concluded that President Trump has not to this point displayed a unified, coherent policy toward East Asia and predicted that he would take more action in 2018.





Yoichi Nemoto

Japan's Role in East Asian Financial Cooperation

Zadankai

February 20, 2018; Uris Hall, Columbia University

Yoichi Nemoto, Former Director, ASEAN+3 Macroeconomic Research Office; Former Director, Policy Research Institute, Ministry of Finance

Moderator: Takatoshi Ito, Professor, School of International and Public Affairs, Columbia University

Yoichi Nemoto, former director of the ASEAN+3 Macroeconomic Research Office (AMRO), spoke about East Asian financial cooperation, the evolution of AMRO, and Japan's role in both. He discussed the progression of financial cooperation in the region from 2004 to 2018, noting that East Asia was not totally surprised by the global financial crisis in 2008 given its preparedness in attempting to secure financial safety nets. Mr. Nemoto described how AMRO spent the years since its inception cultivating trust in the region, which resulted in its becoming an international organization in 2016. Japan undertook a leadership role in the organization, from introducing a rule-based multilateral system to prevent currency crisis, to starting the precedent of getting treaties approved by national assemblies. Mr. Nemoto noted that Japan has achieved, or is in the process of achieving, most of its goals for AMRO.

Challenges and Prospects for Japanese Monetary Policy

(Cancelled due to the University closing in light of the inclement weather)

Zadankai

March 21, 2018; Uris Hall, Columbia Business School

Ryuzo Miyao, Faculty of Economics, University of Tokyo; Former Member of the Policy Board, Bank of Japan

Moderator: Takatoshi Ito, Professor, School of International and Public Affairs, Columbia University Japanese Harmony between Nature and People: Suntory's Corporate Values, Marketing Strategy, and Sustainable Development Philosophy

Zadankai

April 17, 2018; Uris Hall, Columbia University

Toshihiko "TJ" Kumakura, CEO, Suntory America Inc.

Moderator: Hugh Patrick, Director, CJEB

Toshihiko "TJ" Kumakura, CEO of Suntory America Inc., gave a comprehensive overview of his company's values, history, and goals at a lunchtime discussion at Columbia Business School on April 17, 2018. Mr. Kumakura described how Suntory grew from a merchant's store with a single product—a fortified port wine developed in 1907—to a global brand whose holdings include some of the biggest names in liquor and soft drinks. These range from Jim Beam to Maker's Mark to Orangina, to say nothing of Suntory's own signature whiskies. Suntory's main goal, Mr.



Hiroshi Nakaso

Kumakura explained, is to create long-lasting, mutually beneficial relationships with their stakeholders and society, which can be summed up with the phrase "enjoyment and responsibility." Suntory believes that it is responsible primarily to its customers, and to nature itself; indeed, the company expends efforts in protecting the sustainability of water, which is crucial not only for its business but also for society at large.

Fighting to Raise Japan's Inflation Rate

Zadankai

April 19, 2018; Uris Hall, Columbia Business School

Hiroshi Nakaso, Immediate Past Deputy Governor, Bank of Japan

Moderator: Takatoshi Ito, Professor, School of International and Public Affairs, Columbia University Hiroshi Nakaso, who just concluded 40 years of service at the Bank of Japan (BOJ), culminating in his role as deputy governor in March 2018, gave a lunchtime talk about his experience working at the BOJ and, specifically, his involvement in attempting to raise the country's inflation rate. During his tenure at the BOJ, Mr. Nakaso had firsthand involvement in the various financial crises that befell the country in the last 30 years. He discussed the current issues with the Japanese banking system and his opinions on their causes and potential remedies, as well as other factors that impact the Japanese economy. Mr. Nakaso discussed quantitative and qualitative easing and its relation to helping Japan to close the gap toward its 2 percent inflation target.

Workshop



R. A. Farrokhnia speaking at a workshop in Tokyo

Demystifying Blockchain and Cryptocurrencies

An Educational Summit Organized by Advanced Projects and Applied Research in Fintech and the Center on Japanese Economy and Business—Columbia Business School

May 27, 2018; Hotel New Otani, Tokyo, Japan

R. A. Farrokhnia, Adjunct Associate Professor, Columbia Business and Engineering Schools; Executive Director, Dean's Office, Columbia Business School

This was a joint educational summit hosted by CJEB and the Advanced Projects and Applied Research in Fintech, Columbia Business School. The summit was designed and taught by Columbia Business School's R.A. Farrokhnia, executive director for Advanced Projects and Applied Research in Fintech and a recipient of the Dean's Award for Teaching Excellence. The summit offered a comprehensive "gentle guide" and introductory primer to blockchain and cryptocurrencies, intended for participants with limited or no technical background or prior knowledge. This highly sought-after event was well-received by the attendees.

RESOURCES

Faculty Advisory Committee



CJEB core faculty speaking at NHK symposium

CJEB's Faculty Advisory Committee was formed to provide insight and guidance to CJEB's governance, research, teaching, and outreach activities. The diversity of intellectual focus among the committee members is key to furthering CJEB's mission of serving as a comprehensive forum for collaboration and reflection on Japan, the United States, and the global economy. CJEB directors receive valuable advice and recommendations on potential opportunities to expand and develop the Center. In addition to **Hugh Patrick** and **David E. Weinstein,** the members of the Committee are:

Charles W. Calomiris

Henry Kaufman Professor of Financial Institutions

Faculty Director, Program for Financial Studies

Columbia Business School

Fangruo Chen

MUTB Professor of International Business Columbia Business School

Wouter H. Dessein

Eli Ginzberg Professor of Finance and Economics

Chair of Economics Division

Professor, Heilbrunn Center for Graham and Dodd Investing

Columbia Business School

Robert J. Hodrick

Nomura Professor of International Finance

Academic Advisory Board Member, Program for Financial Studies

Columbia Business School

Sheena S. Iyengar

S. T. Lee Professor of Business Columbia Business School

Merit E. Janow

Dean Professor of Professional Practice, International Economic Law and International Affairs

School of International and Public Affairs

Codirector, APEC Study Center

Columbia University

Bruce M. Kogut

Sanford C. Bernstein & Co. Professor of Leadership and Ethics Director, Sanford C. Bernstein & Co. Center for Leadership and Ethics

Columbia Business School

2017-2018 Visiting Fellows

Each year, a small number of professional and academic fellows are selected to spend a period of time in residence at Columbia Business School. CJEB Visiting Fellows receive a unique research and networking experience at one of the world's most prestigious business schools in a top-ranking university while experiencing the dynamic lifestyle of New York City. The 2017-2018 Visiting Fellows are:



Masahiro Endoh Keio University August 2017-August 2018



Yoichiro Hashida Senshu University April 2018-March 2019



Shinichi Hirose Tokio Marine Holdings, Inc. July 2017-December 2017



Hiroshi Hoshino Kyushu University August 2017-September 2017



Yoshio Kinoshita Suntory Holdings Limited October 2017-May 2018



Masaki Mitsuishi MinebeaMitsumi Inc. September 2017-May 2018



Mayuko Morinaga Tokai Tokyo Securities Co., Ltd. February 2017-February 2018



Mariko Oyabu Sumitomo Mitsui Trust Bank May 2017-May 2018



Hideaki Sakawa Nagoya City University September 2017-September 2018



Erika Yamada Hyogo Prefectural **Credit Federation** of Agricultural Cooperatives May 2018-May 2019



Ayano Sato Takasaki City University of Economics August 2017-August 2018



Yuki Yazumi Hyogo Prefectural **Credit Federation** of Agricultural Cooperatives May 2017-May 2018



Junko Shimizu Gakushuin University March 2018-July 2018



Hiroki Takeuchi Mitsui Sumitomo Insurance Co., Ltd. July 2017-June 2018



Kiyoshi Wada Tokio Marine Holdings Inc. May 2018-December 2018



Masazumi Wakatabe Waseda University March 2017-February 2018





Naru Hagiwara National Tax Agency July 2017-June 2018 Joint Fellow with the Weatherhead East Asian Institute (WEAI) of Columbia University



Susumu Kimura University

2018 Visiting Fellow Reunion Reception

CJEB held its annual Visiting Fellow Reunion Reception on May 23, 2018, at the Hotel New Otani in Tokyo. The reunion was cosponsored by CJEB, CBS Alumni Relations, and the Admissions Office, which was attended by more than 110 CJEB Visiting Fellows, CBS alumni, and incoming and prospective students. The reception commenced with welcoming remarks by CBS Senior Associate Director of Individual Giving, **Kelly Garvey.** She then introduced the Columbia Business School Club of Japan (CBSCJ) leader, **Yasuo Sento**, who made brief remarks. **Hugh Patrick** also offered brief welcoming remarks to the CJEB Visiting Fellows, followed by a toast by **Masayoshi Amamiya**, a former CJEB Visiting Fellow and Bank of Japan's deputy governor. **David Weinstein** concluded the reception.



Hugh Patrick speaks at CJEB Visiting Fellow Reunion

2018 Annual Visiting Fellow Business Field Trip

On March 13, 2018, CJEB organized its annual spring business field trip for its Visiting Fellows. The tour started off with a stop at the Columbia Startup Lab, which was hosted by CBS's Eugene Lang Entrepreneurship Center. At the lab, Visiting Fellows had the opportunity to listen to presentations from three different startup ventures regarding their business mission and initiatives. The first venture to present was the Global Youth Mentorship Initiative, which strives to enhance traditional education with innovative mentoring sessions. The second venture was Stratyfy, which aims to bridge the gap between how businesses make decisions today and how they will make them in the future. The third venture, qLogiX Entertainment, focuses on creating interactive games to make STEM learning fun for children. The Visiting Fellows also took this opportunity to ask questions and network with each organization. Lunch was catered by Eat Offbeat, another startup venture hosted by the Columbia Startup Lab, whose employees are refugees and whose menu features cuisine from their chefs' countries. The Visiting Fellows then concluded with a tour of the Bloomberg Office, where they had the opportunity to see the company's unique office and learn about its history and business initiatives.



CJEB directors, staff, and Visiting Fellows at Columbia Startup Lab

Research Associates

CJEB benefits from an ongoing collaboration with Japan specialists from institutions other than Columbia, principally within the United States. Research associates are invited to communicate their research through participation of the Center's projects and public programs and by contributing to the Center's Working Paper Series.

Christina Ahmadjian

Professor, Graduate School of Commerce and Management Hitotsubashi University

Shiro Armstrong

Director Australia-Japan Research Centre Crawford School of Public Policy Editor, East Asia Forum The Australian National University

Schon L. Beechler

Senior Affiliate Professor of Organisational Behaviour INSEAD

Lee G. Branstetter

Professor of Economics and Public Policy Heinz College and Department of Social and Decision Sciences *Carnegie Mellon University* Nonresident Senior Fellow Peterson Institute for International Economics

Jenny Corbett

Rio Tinto Fellow Foundation for Australia-Japan Studies Professorial Fellow, Griffith Asia Institute Griffith University

Robert Dekle

Professor of Economics, Department of Economics University of Southern California

Peter Drysdale

Emeritus Professor of Economics Head, East Asia Bureau of Economic Research Co-Editor, East Asia Forum Crawford School of Public Policy The Australian National University

Robert Eberhart

Assistant Professor Leavey School of Business Santa Clara University Research Fellow Stanford Technology Venture Program

David Flath

Professor Department of Economics Ritsumeikan University Emeritus Professor of Economics Poole College of Management North Carolina State University

Koichi Hamada

Tuntex Professor Emeritus of Economics Department of Economics Yale University Special Adviser to the Cabinet The Cabinet of Japan

Yasushi Hamao

Visiting Professor Schwarzman College Tsinghua University

Masanori Hashimoto

Professor Emeritus The Ohio State University

Takeo Hoshi

Henri and Tomoye Takahashi Senior Fellow and Director of the Japan Program Shorenstein Asia-Pacific Research Center, Freeman Spogli Institute for International Studies Professor of Finance (by courtesy) Stanford Graduate School of Business Stanford University

Anil Kashyap

Edward Eagle Brown Professor of Economics and Finance The University of Chicago Booth School of Business

Takao Kato

W. S. Schupf Professor of Economics and Far Eastern Studies Department of Economics *Colgate University*

Kenneth N. Kuttner

Robert F. White Class of 1952 Professor of Economics Department of Economics *Williams College*

Patricia H. Kuwayama

Economist Professional Fellow Center on Japanese Economy and Business Columbia Business School Former Vice President JPMorgan Chase Bank, N.A.

Edward Lincoln

Professorial Lecturer George Washington University

Robert A. Myers

Senior Vice President Fairfield Resources LLC Former Director of Technology IBM Japan

Terutomo Ozawa

Professor Emeritus of Economics Department of Economics *Colorado State University*

Joe Peek

Vice President and Economist Research Department Federal Reserve Bank of Boston

Adam S. Posen

President Peterson Institute for International Economics

Professional Fellows

William V. Rapp

Henry J. Leir Professor of International Trade and Business School of Management Director Leir Center for Financial Bubble Research *New Jersey Institute of Technology*

Frances McCall Rosenbluth

Damon Wells Professor of Political Science Department of Political Science Yale University

Ulrike Schaede

Professor of Japanese Business Director, JFIT Japan Forum for Innovation and Technology Executive Director, Center on Global Transformation School of Global Policy and Strategy (GPS) University of California, San Diego

Michael J. Smitka

Professor of Economics Williams School of Commerce Washington and Lee University

Tsutomu Watanabe

Professor Graduate School of Economics University of Tokyo

Eleanor Westney

Professor Emeritus of Organization Studies The Schulich School of Business York University

Jiro Yoshida

Associate Professor of Business Department of Risk Management Smeal College of Business The Pennsylvania State University Project Associate Professor Graduate School of Economics University of Tokyo A professional fellow appointment at the Center recognizes former government officials and business leaders who have had distinguished careers in economics-related fields. This position facilitates his or her ongoing involvement with CJEB and its activities.



Robert E. Fallon is president and CEO of Phosplatin Therapeutics LLC, a company he helped found that is developing a novel class of anticancer chemotherapy drugs. From 2008 to 2011, Mr. Fallon

was adjunct professor at Columbia Business School, where he taught international banking. Prior to his Columbia appointment, Mr. Fallon was chairman of Korea Exchange Bank, a publicly listed \$80 billion institution that is Korea's leading international bank. After taking over as chairman and CEO in January 2004, he led a successful reorganization and restructuring that restored the bank's capital strength and achieved record profitability. He is also the first non-Korean to chair a public company in Korea. Previously, Mr. Fallon was an international banker based in Tokyo with JPMorgan Chase, where he was Asia-Pacific division head for the Chase Manhattan Bank and a member of the Chase Manhattan Corporation Management Committee. He was responsible, as senior executive in Asia, for Chase's activities in the Pacific Rim located across 13 different countries. Mr. Fallon has lived in Asia for more than 30 years and enjoys a myriad of contacts across a wide spectrum of government, corporate, and financial institutions in the region. He travels widely and speaks often on Asian economic and business affairs. He started his banking career with Citibank in Hong Kong in 1975 and later worked in investment banking and management positions in Tokyo. Subsequently, he assumed Asia regional responsibility with Drexel Burnham Lambert and Bankers Trust Company before joining Chase in 1992. Mr. Fallon holds a BA from Ohio University and an MBA from Harvard Business School. Following his

undergraduate studies, he served in the U.S. Peace Corps, including three years as a volunteer mathematics teacher at Chanel College in Western Samoa. Mr. Fallon is chairman of the Council on International Educational Exchange, Inc., a member of the Asia Society and the Council on Foreign Relations, and a professional fellow of CJEB. He is a former director of the Japan Society and of the Korea Society, as well as trustee emeritus of the Ohio University Foundation.



Patricia Hagan

Kuwayama has been studying the Japanese economy since she was a graduate student in the 1960s, completing a doctoral dissertation on effective tariff protection of the Japanese

industry in 1970. She became a professional fellow of CJEB in 2009, after retiring as a vice president and international economist at JPMorgan Chase in New York. Previously, she was JPMorgan's chief economist in Tokyo and earlier with Chemical Bank in Tokyo. From 1970 to 1986, Dr. Kuwayama was with the Federal Reserve Bank of New York, serving in various research and management posts in the International Research, Statistics, and Foreign Exchange Departments. She has been a visiting scholar at the Bank of Japan Institute for Monetary and Economic Research and visiting consultant at the Bank for International Settlements in Basel and taught as a visiting professor at Keio University in Tokyo and at Kobe Gakuin University. Dr. Kuwayama has written widely about Japanese macroeconomic policy, balance of payments issues, and financial institutions, including the postal savings system. She assisted Eleanor M. Hadley in writing Memoir of a Trustbuster: A Lifelong Adventure with Japan. She earned her BA and PhD degrees in economics at Harvard University and the City University of New York, respectively, and did her Japanese language studies at Columbia University. She participates actively in the CJEB Visiting Fellow Seminars.

International Advisory Board



David E. Weinstein speaking at a CJEB sponsor dinner

The International Advisory Board provides overall guidance for CJEB. Members are distinguished leaders in the fields of Japan-U.S. economic, business, and political relations.

Richard Folsom

Representative Partner Advantage Partners

Shinji Fukukawa

Former Vice-Minister Japanese Ministry of International Trade and Industry Senior Adviser *Global Industrial and Social Progress Research Institute* Chairman Board of Trustees Toyo University

Yasushi Kinoshita Chairman Development Bank of Japan Inc.

Charles D. Lake II

Chairman and Representative Director Aflac Life Insurance Japan Ltd. President Aflac International

Yuzaburo Mogi '61 Honorary CEO and Chairman of the Board Kikkoman Corporation

Toshikazu Nambu

Senior Managing Executive Officer Sumitomo Corporation

Atsushi Saito

Commissioner Nippon Professional Baseball Organization Senior Fellow to KKR Global Institute KKR Japan

Taisuke Sasanuma Representative Partner Advantage Partners, Inc.

Joseph G. Tompkins '67 President Saga Investment Co., Inc.

CJEB in the News

CJEB and its academic directors are regularly featured in the media, providing their insights and expertise in Japan-related matters. Highlights for this year include:

Hugh Patrick

Professor Hugh Patrick of Columbia University Interviews Local Business Leaders Nihonkai Shimbun, June 1, 2018

David E. Weinstein

Bonds ... Japanese Bonds NPR Planet Money, March 13, 2018

Takatoshi Ito

Professor Ito on Inflation, BOJ Meeting, ETFs Bloomberg, July 18, 2017

Columbia Professor Ito Says Conditions Warrant No Further BOJ Easing *Bloomberg, February 18, 2018*

Alicia Ogawa

Japan Inc. and the Peril of Inbred Management Nikkei Asian Review, January 30, 2018

CJEB/CBS-Related News

The following CJEB events and CJEB-related initiatives were featured on leading news outlets. Some of the titles have been translated from Japanese to English.

His Excellency Tarō Kōno, Japan's New Foreign Minister: A Dialogue with Columbia Students about Diplomacy

Featuring: His Excellency Tarō Kōno, Foreign Minister of Japan

Featured On (September 22, 2017):

Jiji Press

Huffington Post

Sankei Shimbun

Mainichi Shimbun Asahi Shimbun The Japan Times Newsweek Japan Today Trump's Economic Policies and Their Implications for Japan and Asia

Featuring:

Glenn Hubbard, Dean; Russell L. Carson Professor of Finance and Economics, Columbia Business School **Joseph E. Stiglitz,** University Professor, Columbia University

David E. Weinstein, Carl S. Shoup Professor of the Japanese Economy, Columbia University; Director of Research, CJEB

Takatoshi Ito, Professor, School of International and Public Affairs, Columbia University; Director, Program on Public Pension and Sovereign Funds, CJEB

Hugh Patrick, Director, CJEB

Featured On (December 15, 2017):

NHK Global Agenda



CJEB with corporate sponsors

Enhancing the MBA Experience



Shinichi Hirose speaking with Columbia University students

Chazen International Study Tour participants at the Golden Pavilion

CJEB is a key contributor to the Columbia Business School's (CBS) international community and seeks to pursue opportunities to enhance the MBA student experience. In this endeavor, CJEB's major collaborative partner is the CBS Japan Business Association (JBA), a student-led organization that promotes Japanese business and culture to the CBS community. The Center regularly meets with JBA officers to exchange ideas on ways to promote Japanese economy and business-related issues within CBS.

As an annual initiative, CJEB assists the JBA in organizing the Chazen International Study Tour to Japan. Led by the Jerome A. Chazen Institute for Global Business, the Japan Study Tour sends a group of students on a weeklong trip to Japan, providing a unique opportunity for the students to experience cultural excursions and visits to Japanese corporations. Since the tour's initiation in 1989, CJEB has helped fund the program and contributed to its agenda. Before each trip, the student trip organizers consult with Professor Hugh Patrick and CJEB's director for administration, Ryoko Ogino, on possible company visits and on the overall current state of the Japanese economy.

The 2018 Chazen Japan Study Tour took place from May 13 to May 20 and was an enormous success. Visiting Kyoto, Aichi, and Tokyo, the 40 MBA students met with representatives from Japanese corporations and immersed themselves in Japanese cultural sights and experiences. CBS adjunct assistant professor of business Brett Martin joined the group.

In Kyoto, they toured the Omron manufacturing plant to learn about the company's advanced initiatives on employment for individuals with disabilities, vividly demonstrating a good example of corporate social responsibility (CSR). They also visited Suntory's Yamazaki distillery to learn about the production process of its world-famous whisky. In addition, they enjoyed their visit to several historical sites, including the Golden Pavilion and the Fushimi-Inari Shrine.

In Aichi, the tour group had a great experience visiting Toyota's manufacturing plant, where the students had an opportunity to see Toyota's world-leading production process, about which they had learned in their core operations class. They also stayed in a *ryokan* (a traditional Japanese inn) in Gamagori and experienced bathing in an *onsen* and eating a traditional *kaiseki* dinner.

At their final stop, Tokyo, the students listened to presentations from Mitsubishi Real Estate and Shiseido, two traditional Japanese long-lasting companies, and from 500 Startups, which the students enjoyed due to the growing interest in startup companies. The students also appreciated their visit to Shiseido as it was the first time the tour organizers were able to coordinate such a visit. One of main highlights of this trip was the impressive presentation and Q&A by Shiseido's CEO, Masahiko Uotani, who is also a CBS alumnus. After these company visits, the participants stopped in Asakusa, enjoyed watching sumo wrestling in Ryogoku, and participated in a tea ceremony within the Happo-En in Shirokane, all of which made the trip a unique Japanese cultural experience.

JBA also cohosted an "International Week Food Festival" night on April 4, 2018, with other regional/affinity clubs. At this event, which CJEB funded, the JBA officers prepared Japanese food and drinks for the Columbia community, introduced Japan's food industry, and demonstrated Japanese

Enhancing the Columbia Experience

traditional clothing. This event gave Columbia students an opportunity to learn about various cultures as well as appreciate and celebrate the diversity at Columbia.

The CJEB annual welcome reception for CJEB Visiting Fellows, students, and other CBS community members was held on September 26, 2017. CJEB officers and staff welcomed the CBS community to the new academic year, allowing CBS students the opportunity to network with CJEB Visiting Fellows and CBS faculty and staff from other departments.

On December 6, 2017, CJEB organized a special breakfast lecture featuring one of CJEB's Visiting Fellows, Shinichi Hirose, managing executive officer at Tokio Marine Holdings, Inc. for Columbia students, including those from JBA and the Japan Study Student Association (JASSA). Mr. Hirose shared his views on the current challenges in the life insurance industry and why enterprise risk management are essential to his company's sustainable growth strategy.



The audience at Tarō Kōno's lecture

Columbia University offers many resources and opportunities for students, faculty, and alumni interested in learning more about Japan outside the Business School. CJEB contributes to this initiative by assisting other organizations on campus that are engaged in Japan-related activities. This includes the Weatherhead East Asian Institute (WEAI), the APEC Study Center, the East Asian Languages and Cultures (EALAC) Department, the School of International and Public Affairs (SIPA), and many others.

CJEB continues to serve as a contributor to the Columbia Japan Society (CJS), a student-run organization that focuses on educating the University community as well as the greater New York City public on Japanese culture, history, and language. In 2018, CJEB provided a generous sponsorship that allowed CJS to organize and partially fund its annual Matsuri event, a Japanese-style festival, held on Low Plaza at Columbia University. The festival serves as a way to celebrate Japanese history, food, and culture, while supporting local businesses, ultimately creating a space where the private sector, the public, and academia can connect through the celebration of Japanese tradition.

CJEB is continually active and committed to promoting Japan-related activities at Columbia through the support of JASSA and its initiatives. On September 21, 2017, CJEB worked with JASSA and other centers to cosponsor a special lecture for Columbia students with His Excellency Tarō Kōno, who is the foreign minister of Japan. On February 1, 2018, CJEB and JASSA also cosponsored a zadankai titled "The Trump Administration's Asia Policy," featuring Glen S. Fukushima, senior fellow at the Center for American Progress. In spring 2018, JASSA also planned a lunch session, funded by CJEB, featuring two Japanese diplomats who shared their experience working at a Japanese embassy in Uganda and at the Permanent Mission of Japan to the UN. JASSA held four cultural events and two language table sessions in the spring, which

Visits from Japan to Columbia

CJEB also funded. Their cultural events included a PyeongChang Winter Olympics celebration gathering for students, a Lunar New Year celebration, which included a joint food tasting event, an origami workshop, and a *sake* tasting event. The language tables provided an opportunity for native Japanese and individuals interested in Japan-related careers or research to network and communicate.

Aside from funding and programming, CJEB engages with the student community by providing opportunities for Columbia students to work at the Center as student casuals. They are selected from a number of applicants, and their contribution to the CJEB team is invaluable, as they are deeply involved in the day-to-day operations of the Center. The Center is committed to developing our student workers professionally while providing a unique learning opportunity. Our student casual program is open to high-performing and proactive students with relevant backgrounds and interests from across the University.



Hugh Patrick with TOMODACHI Sumitomo Scholars

Groups of Japanese undergraduate and graduate students often visit CJEB during their tours of the East Coast. In 2017–2018, student groups from Meiji University, Bunkyo University, and Wako University came to Columbia University. Each group met with Professor Patrick, who gave a brief introduction and fielded questions. Discussion topics included U.S.-Japan relations; U.S. trade policies; tensions in East Asia; Japan's workplace challenges, especially for women, and related policies; challenges presented by Japan's aging population; and attitudes toward foreign study and employment.

In spring 2018, the New York office of CJEB's longtime lead corporate sponsors, Sumitomo Corporation of Americas, visited CJEB and Columbia twice as part of its TOMODACHI Sumitomo Corporation Scholars Program. Through this program, scholarship recipients, who come from Japanese universities, are given the opportunity to study abroad in the United States for one year. This year Sumitomo visited CJEB on January 9, 2018, and March 26, 2018, where Professor Hugh Patrick and CJEB's director for administration, Ryoko Ogino, welcomed students and executives from Sumitomo and engaged with them in a lively discussion on Japan, the world economy, and the students' future prospects. Students were given the opportunity to meet and exchange ideas with, and receive career advice from, CBS and SIPA graduate students.

Fellowship and Scholarship Programs



From left to right: Hugh Patrick, Jackson Lu, and David E. Weinstein

CJEB provides select fellowships for Columbia University students who demonstrate outstanding academic ability and a specific interest in Japan and the Asia-Pacific economies. These fellowships support research and participation in academic programs related to Japanese economic and business fields. Further information on these opportunities is available at www.gsb.columbia.edu/cjeb/resources/fellowships.

The **CJEB Doctoral Fellowship** was established in 2013 to support PhD students at CBS and/or Columbia's Department of Economics who intend to develop Japan expertise, culminating in dissertations focused primarily on Japan. Our CJEB Doctoral Fellowship recipients include Guannan (Jackson) Lu in the Management Division of CBS and Shogo Sakabe in the Department of Economics of Columbia University. Jackson, who is our first PhD fellow, obtained his PhD in management from CBS in 2018 and will be teaching at MIT in fall 2018. His research focused on the benefits and risks of globalization for individuals, groups, and organizations. On April 27, 2018, he gave a lecture for our Visiting Fellows and CJEB directors to share his findings on the concept of the "bamboo ceiling," which discussed how Asians struggle to achieve leadership roles in society. CJEB Doctoral Research Grants and Summer Stipends are also available to PhD students at CBS or the Department of Economics who wish to pursue Japan-related research projects or language training programs. The Center also awarded a stipend in spring 2018 to Cameron LaPoint, another PhD candidate in the Department of Economics, to further his research on the Japanese economy.

The Sumitomo Fellowship Program was

established by the Center as part of an initial operating grant from Sumitomo Corporation of Americas. The program has provided support to various Japan-related research initiatives, and the fellowship recipients engage in their own research as well as participate in CJEB programs. Misaki Matsumura, PhD candidate in the Department of Economics, was this year's recipient.

The Mitsubishi UFJ Trust Scholarship

Foundation provides one Columbia University student each year with tuition and living expenses for a program of either undergraduate or graduate study in Japan. CJEB conducts a University-wide competition on behalf of the Foundation to nominate a student. The award was granted to Spencer Cohen of Columbia University for 2018–2020.

Library and Data Resources



Columbia University is home to one of the largest collections of Japanese- and Englishlanguage materials in the United States. CJEB evaluates Columbia University library resources and commits funding to procure new materials on Japan and the Asia-Pacific economies. CJEB also maintains a small working collection of materials on the Japanese and Asia-Pacific economies, including statistical resources, academic journals, and periodicals.

Data Resources

The Center continues to develop its major computer-based databank on the Japanese economy, with an emphasis on financial markets, under the direction of Professor David Weinstein. The databank is a compilation of statistical resources for faculty members and students conducting relevant research. CJEB's databank includes:

- Time-series and cross-section data on financial markets, institutions, and the macroeconomy from Nikkei NEEDS Financial QUEST
 2.0 and the Development Bank of Japan's Industrial Financial Database.
- An online news and data retrieval system that provides essential corporate and economic data as well as leading newspaper and journal articles on Japanese and other Asia-Pacific economies from Nikkei Telecom, which is accessible via Columbia University Libraries (CLIO)

Other data resources:

CJEB Research Associate Professor Tsutomu Watanabe of the University of Tokyo (along with Kota Watanabe of Chuo University and the University of Tokyo) launched the UTokyo Daily Price Index project in May 2013, which measures and publishes the consumer inflation rate on a daily basis.

Discussion Groups

Japan Economic Seminar

The Japan Economic Seminar (JES) was founded in 1966 by the late Professor James Nakamura of Columbia and Professors Hugh Patrick (then at Yale) and Henry Rosovsky of Harvard. With a membership of up to one hundred individuals, it originally was an interuniversity forum for faculty, other professionals, and advanced graduate students to discuss ongoing research in preliminary form by specialists on the Japanese economy. JES now meets once a year, sponsored by CJEB, and is held at Columbia in the spring semester under the leadership of Takatoshi Ito, professor at Columbia's School of International and Public Affairs and director of the Program on Public Pension and Sovereign Funds at CJEB. Special arrangements have been made to include economists from Japan as paper authors and discussants.

This year, the JES was held on February 16, 2018, and had four sessions. These sessions were moderated by Professors Ito and Weinstein. The Japan Economic Seminar thanks the James Nakamura Fund for its support.

The following papers were discussed:

Enjoying the Quiet Life: Corporate Decision-Making by Entrenched Managers

Presenter: Kotaro Inoue, Professor, Tokyo Institute of Technology

Discussants: Konari Uchida, Professor, Kyushu University and Visiting Scholar, University of Utah; Tokuo Iwaisako, Professor, Hitotsubashi University

Identifying Neighborhood Effects among Firms: Evidence from Location Lotteries of the Tokyo Tsukiji Fish Market

Presenter: Kensuke Teshima, Assistant Professor, Centro de Investigación Económica Instituto Tecnológico Autónomo de México (ITAM) (co-authored with Kentaro Nakajima, Hitotsubashi University)

Discussants: Donald Davis, Professor, Columbia University; Jessie Handbury, Assistant Professor, The Wharton School, University of Pennsylvania

Secular Stagnation under the Fear of a Government Debt Crisis

Presenter: Kozo Ueda, Professor, Waseda University (co-authored with Keiichiro Kobayashi, Keio University)

Discussants: Gauti Eggertsson, Professor, Brown University; Etsuro Shioji, Professor, Hitotsubashi University

The Decline in Bank-Led Corporate Restructuring in Japan: 1981-2010

Presenter: Takeo Hoshi, Henri and Tomoye Takahashi Senior Fellow, Walter H. Shorenstein Asia-Pacific Research Center, Stanford University (co-authored with Satoshi Koibuchi, Chuo University, and Ulrike Schaede, University of California, San Diego)

Discussants: Masami Imai, Professor, Wesleyan University; Patrick Bolton, Professor, Columbia Business School, Columbia University

U.S.-Japan Discussion Group

Shortly after CJEB was founded, the then-CEO of Sumitomo Corporation of Americas and Professor Patrick took the initiative to organize, on a private and individual basis, an evening discussion group attended by senior Japanese and American businessmen and professionals living in the New York area. The group continues to convene to discuss frankly and informally-and off the record—issues and prospects in U.S.-Japan business, economic, and political relations. Shingo Ueno, the current CEO of Sumitomo Corporation of Americas, and Hugh Patrick are the co-organizers of this group. The members come from the business and financial communities, together with several specialists on Japan from the Columbia University faculty. The group avoids identification with any particular companies or groups and meets twice in the fall and spring for dinner and discussion. The discussions naturally focus on the wide-ranging political economy and how Japanese and American corporations operate domestically, abroad, and with each other. Topics discussed in 2017-2018 included the implementation of Abenomics, TPP, political stability with Abe in Japan, Trump's election, Trump's economic policy pronouncements, and his administration's initial policy proposals.

Financial Support

Columbia University and Columbia Business School (CBS) give basic support for the Center by providing faculty salaries and office space, library and administrative support, and other essential services. However, the Center relies on external sources of financial support from foundations, corporations, and individuals for its programs and research activities. Income is derived from the Center's endowment, operating and project grants, and, especially, from its Corporate Sponsorship Program, which was established in 1995. Academic independence has not been an issue, as there are no special restrictions attached to any of these gifts.

The Sponsorship Program has been instrumental in expanding the Center's activities and guaranteeing their long-term financial support. The companies listed below support CJEB through funding to help establish an endowment or provide funding on an annual basis. Sumitomo Corporation of Americas made an initial significant contribution that enabled the Center to be established in 1986 and has continued to be a major Center donor. The Center also greatly appreciates and benefits from the income derived from the generous endowments funded by Fuji Xerox Co., Ltd., Sanken Industrial Policy Research Institute, the Marine and Fire Insurance Association, the Federation of Bankers Association, the Security Dealers Association, the Life Insurance Association, and Mitsubishi UFJ Trust and Banking Corporation during the first years of the Center's establishment at CBS and now.

On April 26, 2018, Professor David E. Weinstein, CJEB's director of research, presented his paper "The Crisis That Wasn't: How Japan Has Avoided a Bond Market Panic" over dinner with a small group of CJEB sponsors and other guests at Faculty House, Columbia University. This was a great opportunity for our guests to discuss and exchange ideas on the current Japanese economy in a private setting. On May 26, 2018, CJEB was delighted to hold a special luncheon at the Hotel New Otani Tokyo for our corporate sponsors in Japan to demonstrate our deep appreciation for their continued support. Professor Weinstein presented his paper at this luncheon as well.

Sponsorship Program

Sponsors for the year 2017–2018 are as follows:

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